Management Study
and Benchmarking Analysis
of the
Warwick School District

Prepared by
The Rhode Island Public Expenditure Council (RIPEC)
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RIPEC

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Warwick School District

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I. RIPEC Recommendations

Developing a School budget is a complex process that includes making a number of assumptions on State school aid, Federal grants, staffing and enrollment. Timing of intergovernmental revenue can have an impact on budget development. For example, all school districts, including Warwick, begin and complete its annual budget process before the State agrees on school aid distributions. The District builds a budget that includes school aid as proposed by the Governor, who presents his budget in January. However, the School Committee and the City take action on the local budget prior to changes included in the State's Enacted Budget.

One should note that given the lack of a contract, it is difficult to assess the true impact personnel costs have had and will have on the budget. The school district and its teachers are now in their third year of service without an agreement. Regardless of when an agreement is found and the content of the contract when ratified, there will be significant financial implications for the school department, the City and the Warwick taxpayers. As the School District moves forward, there are a number of actions that can be taken to improve the budget process, enhance budget information, maximize potential revenue sources, improve efficiencies, and prepare for the implementation of a teacher contract. The following recommendations focus on these issues.

The following highlights key findings and recommendations from the RIPEC Warwick School District Management Study presented March 22, 2006.

Modernize the School District Budget Document – While the department's public budget document is useful, it has a number of limitations. There are a number of potential changes to the document that would ensure taxpayers and policy makers have a robust picture of the school department's operating budget. The school district should also consider using the budget process and its document as an opportunity to educate others on its activities. It is also an excellent opportunity to make a compelling case for its needs. Some changes to be considered include:

- An introduction narrative (and relevant tables and charts);
- All Funds Budgeting;
- Two years of actual experience;
- Current year enacted budget and a revised spending and revenue plan;
- Proposed funding plan for coming fiscal year;
- Five year forecast; and
- A detailed Personnel Supplement

Develop a Budget Narrative – The budget document is the fundamental policy document for most organizations, and as such, should be viewed as the principle communication tool for policymakers as well as taxpayers. It serves as the central tool for fiscal discipline and control, permits policymakers the opportunity to direct resources to their highest priority, and provides an opportunity to outline the challenges that lie ahead. The current budget document presented by the School Superintendent and subsequently, the School Committee, includes a brief letter from the Superintendent, outlining a few issues in the budget. However, this does not go far enough to take advantage of the opportunity to provide explanations of the budget, its goals, and the major issues dealt with in the budget. An effective narrative should provide summaries of financial information, such as trends in revenues and spending. The narrative is also a good opportunity to discuss future educational challenges that may impact the district.

Implement All Funds Budgeting - A major component of the school district's budget not represented in the operating budget are the district's funding sources and related expenditures from Federal and other third party sources. A key issue facing the School District is that while it is often aggressive in pursuing Federal and other non-traditional funding to provide some relief to the general fund, these expenditures may require full or partial support after the alternative funding has ceased to exist or has diminished. Decision-makers need to understand the implications of alternative funding sources, and the potential impact they will have on the operating budget in the future.

Warwick Public Schools
Expenditures - All Funds

Fund	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
General Funds	$111.3	$116.4	$126.5	$132.3	$134.9	$138.2	$141.6
Grants	4.3	4.3	5.1	6.2	6.2	6.2	6.2
Student Lunch	2.1	2.3	2.3	2.5	2.7	2.8	2.9
Total	$117.7	$122.9	$133.9	$141.1	$143.8	$147.2	$150.7

Source: RIPEC Calculations based on Warwick School Department and RIDE Data

Based on these considerations and given that the School District has nearly $6.2 million available in Federal Funds annually, all these funds and related staffing should be reflected in its annual operating budget and integrated into its annual spending decisions for the school committee. These funds play a critical role in the overall fiscal health of the school district and support over 4.2 percent of the total school district spending plan. All funds budgeting also permits decision-makers to identify potential shifts in what resource can support ongoing program and administration expenditures, such as indirect cost recovery. This is critical, especially when finances are finite and there is limited flexibility in programs due to laws and regulations. These funds also support nearly 85.0 FTE positions, the majority of which are professional teaching positions. Federal funds support approximately $4.6 million in personnel costs not reflected in the analysis above – nearly 75.0 percent of all Federal funds.

Clearly the School Department was able to take advantage of Federal funding opportunities to help support general operations or academic programs. The Department should be encouraged to continue pursuing these opportunities when they arise. However, while it is critical to maximize Federal and non-traditional funding sources to relieve general funds from supporting all programs, it is critical to understand the entire spending picture of the school district.

In addition to Federal funding, the school district spends $2.9 million in school lunch services, and receives other funding (often one-time) through other parties, such as the Champlin Foundation, the State Council on the Arts and others. For example, the School Department received approximately $220,000 in funding from the Champlin Foundation. As the School Department moves towards all funds budgeting, efforts should be made to adjust prior year actual experience in the budget document as well.

Enhance Internal Budgeting and Financial Management – The school department's management of financial information and its process for developing and representing its budget provided sufficient information to develop a baseline of spending expectations. However, while there has been improvement in the budget and financial management process in the school district, there are certain areas that could use additional attention. While one can track the budget as it progresses through the budget making process, there is a lack of sufficient documentation to track budget numbers to actual experience as the year progresses. While a budget is a living document, one needs to have consistent benchmarks to compare changes as the year progresses. This would provide the business office, the superintendent and the school committee the kind of information needed to determine how effective their budgeting was compared to actual experience as the year progresses.

While there are tables available, there are no analyses comparing actual experience to originally enacted budgets, reviewing shifts in spending among line items mid-year, nor analyzing the impact Federal and other third party financing have on the general operating budget. The school department provides good explanations to what they remove or add from the budget as funding decisions are made, and that has proven valuable in guiding policymakers through the process. This could be further enhanced by additional explanations of shifts within budget line-items, outlining the rationale as well as indicating what actions will be taken to re-adjust the base for future fiscal years.

An example of a report that may be further developed is the revenue report submitted to the School Committee – these reports generally show collections to date and the amount needed to meet budgeted amounts. While this is helpful, additional information showing what the school department anticipates the actual collections to be would be helpful. Finally, to provide additional information, the budget document should include two years of actual experience (most recent completed year may be preliminary), the enacted and revised budget for the current fiscal year and the proposed funding for the coming fiscal year.

Enhance Personnel Supplement - There is a need to enhance the personnel supplement information. The current supplements provide an overview of the number of FTE positions by professional and classified employees. It provides general data about positions, where the positions are located, salary ranges, total salary cost for those positions and funding source. While this information is helpful and is certainly more detailed than in several other school districts, there are some changes that may make this document more useful as a management tool in the future.

For example, it may be worth modeling the personnel supplement after the State Personnel Supplement, which provides multiple years worth of data by office and department, includes the total personnel expenditure package – including benefits and contracted services (which are currently not included in the Warwick personnel expenditure line, but rather as a purchased services line), as well as summary information regarding funding streams. In addition, the personnel supplement is another opportunity to outline personnel trends, expenditure changes related to current programs verses changes due to financial considerations or new programs, as well as gain a greater understanding of the impact personnel has on the overall operations of the school department.

The school department currently does manage more sophisticated personnel information internally, and therefore should be able to enhance this public document. This would go hand in hand with the all funds budgeting proposed above. The combination of all funds budgeting with improved personnel reporting will provide a tool to manage overall staffing levels.

Consideration should be given to establishing FTE limitations for the school department, and using this management tool to begin managing down the staffing levels in low-priority areas - given the magnitude of the financial impact a teacher contract will have on the school district. In other words, the school department should establish an FTE position cap as well as targets to reach over a period of time. These management tools are central to understanding a complex organization such as the Warwick School Department with an operating budget in excess of $150.7 million (all funds).

Establish Annual Five-Year Forecast - The school department, in concert with the City Administration, should develop and annually update a five year forecast for the school district. This should include a detailed discussion of the baseline and the assumptions upon which the forecast is based. This should be done with the understanding that a forecast is a financial tool, not a defining document of future spending needs. It provides insight into how decisions today will impact the school district's ability to meet the needs of tomorrow. In addition, it will provide an excellent communication tool with the City Administration. There is no question it will be difficult to translate some of the school district's needs and demands into financial terms. The demands imposed by the No Child Left Behind Act will be increasingly difficult to articulate financially. But a forecast will provide everyone with a benchmark that can be used to discuss future needs, as well as compare performance to forecasted budgets.

Pursue More Aggressive Federal Indirect Cost Recovery – While this forecast assumes Federal indirect cost recoveries will grow at or about the rate of personal income growth, RIPEC would like to take this opportunity to suggest that this revenue effort could be maximized. The School District currently does not aggressively pursue Federal indirect cost recoveries, which permit school districts to allocate a portion of the Federal grant to offset administrative costs associated with the grant. RIPEC believes this has untapped potential for additional funding to support the department that would offset existing general revenue appropriations. One should note that if one does in fact identify funding that can be used for indirect cost recovery, it may mean that some of these funds would have to come from existing uses for program.

Prepare for Teacher Contract – The forecasts discussed in this Study indicate that there is a need to develop a meaningful financial plan that incorporates **both** permanent cost savings measures within the school department to offset some of the expenses associated with the contract and a financing structure that raises sufficient funds to support the balance of the costs of implementing a new contract. Both of these efforts will require difficult choices for both the school department as well as the City's taxpayers.

The FY 2006 budget does not include any expenditure associated with additional costs for contract provisions. The school department ended the FY 2005 fiscal year with a balance of $2.5 million, of which $2.3 million are currently set aside to finance a portion of the retro-payment costs associated with a new contract. The following are RIPEC recommendations to begin preparing for a new teacher contract.

a. RIPEC recommends that the $2.3 million already in the Audit Reserve for Education Account should remain in said account for the sole purpose of funding any retro-payments to settle the teacher contract. In other words, the $2.3 million in surplus should not be incorporated into the school district's FY 2006 operating budget - it should remain outside of general operations.

b. RIPEC recommends that all parties (school district, school committee, City Council and the Mayor) should work cooperatively to contain costs to ensure there is an adequate funding stream to meet the needs of a new contract. In RIPEC's review of the operating budget, it appears that there may be at least $521,000 in net savings due to turnover and non-personnel spending patterns (see details in Five-Year Forecast discussion). These funds should be identified and removed from the operating budget and placed in reserve as soon as possible to assist in the payment of the retro-payment obligations for the teacher contract.

c. RIPEC recommends that further efforts, such as refraining from selected purchases of materials and leaving non-essential positions unfilled through the balance of the year, will help further reduce the impact on the FY 2007 funding plan. It is critical that the School Department concentrate on additional cost-savings measures for the remainder of FY 2006 to drive the reserve up, with a goal of reaching $4.3 million in order to finance the projected retro-payment based on the School Committee's last contract offer.

d. Should the School Committee and the Teacher Union come to an agreement, the School Committee and the City Council will have to be prepared to implement the provisions of such a contract. Therefore, RIPEC recommends that the School Committee, City Council and the Mayor establish a formal mechanism to coordinate and develop a long-term plan to meet the demands of a teacher contract. Consideration should be given to continuing the work of the Advisory Group established for this Management Study. RIPEC believes there has been some progress and good will established through this process, and as a result, there is a greater understanding of each other's perspective on a wide range of issues.

e. RIPEC recommends that the Warwick School Department submit a FY 2007 Operating Budget Request that is based on current services. Given negotiations are expected to continue and the school department must develop and present a budget in the coming weeks, it is important to submit a budget that represents existing obligations. Therefore, any costs associated with a new contract should not be integrated into the budget. Rather, these costs should be discussed and outlined in the narrative section of the budget request, and should be analyzed as part of the five-year forecast (See earlier recommendations).

Address Operations Expenditures – Based on findings from the Benchmarking Analysis, Warwick's per pupil expenditures of $12,383 in FY 2005 are the highest among the peer districts. They are also higher than the State average of $11,876. This is partially a function of declining enrollment in Warwick. However, it may be also a function of higher expenditures for operations when compared to its peer communities. In Warwick, these expenditures took up 16.6 percent of total expenditures in FY 2005 (based on RIDE In$ite data). Among its peers, the percentage ranged from 12.0 percent to 16.2 percent in FY 2005. The State average during that time period was 15.3 percent.

In Warwick, the majority of the growth within operations comes from increased expenditures to upkeep facilities. Warwick had the highest per pupil expenditures for facilities, spending $1,082 per pupil in FY 2005. This outpaced all of the other peer school districts, with Warwick being 20.2 percent higher than the next highest school district. Another growth factor in Warwick was expenditures related to business operations. Warwick's business operation expenditures of $244 per pupil were the highest among the peers, 76.6 percent higher than the peer average of $138 per pupil.

Recommendations of the Management Study – Information Technology
RIPEC was asked to review the School District's Information Technology systems as part of this analysis. The evaluation of the Information Systems included funding resources used for technology, policies and procedures supporting technology, hardware and software, staffing, and support. This document outlines recommendations for improvement and includes an environmental scan of the Information Systems implemented in the district.

Evaluate the potential for establishing a unified IT function with the City and the School Department - The City and the School Department should consider combining Information Technology resources. With similar initiatives planned by both entities, a unified plan may drive down costs and provide the City and School Department with a more efficient, cost-effective and robust IT infrastructure that neither entity could afford individually.

The City and the School Department may increase productivity and efficiency by integrating resources. Although the technology usage is different for each entity, there are fundamental technologies that are similar, such as networking, Server Operating System support, and Desktop support. By integrating some of the tasks of the teams, the City and the School Department may utilize additional resources to increase support time and may reduce out-sourced maintenance contracts.

Explore the feasibility of moving toward a unified Financial Management Information System (FMIS) for the City and the School Department - The School Department and the City should work towards a unified Financial Management Information System (FMIS). In developing a strategy to unify the FMIS systems under one program, it is essential that appropriate policies and procedures be put in place to ensure the integrity of the system is maintained.

This initiative could serve as a catalyst for the consolidation of the School Department's Controller function and the City's Treasurer's Office. In fact, this would prove valuable to both entities going forward given much of the current practice of sharing information is essentially manual. In addition, there would be cost savings in licensing, updating and maintaining the system, as well as IT staffing in the future. The unified FMIS system could also lead to a smoother transition to a pooled purchasing and controller function for both the District and the City.

Explore the feasibility of integrating the Wide-Area Network and IP Telephony initiatives - The City and School Department can save money long-term by combining the two WAN networks. It is understood that a plan was in place to run fiber-optic cabling throughout the City to interconnect all buildings with a fast pipe. If the City interconnects to the School Administration Building, services could be centralized and efficiencies could be realized. First, the City would be able to take advantage of the Disaster Recovery solution the School District has in place and leverage each other's services. Also, the cost of Internet Access may be reduced by consolidating. Another area is an initiative that both the City and the school department have explored -

upgrading the existing voice system to IP Telephony. By implementing IP Telephony city-wide, all entities may reduce the overall recurring costs of telecommunications by leveraging each others resources. The total number of Telco lines would be reduced, the number of PBX systems would be reduced, and overall maintenance should decrease.

Recommendations of the Management Study – Central Administration
RIPEC was asked to review the central administrative function of the Warwick School Department. RIPEC focused most of its attention on the operations of the Central Business Office (CBO), and has reviewed similar activities performed by the City to see if there were potential savings while maintaining quality back-office services to the school district and City.

Pursue Central Pooling of Existing Clerical Staff Across Functions - The extensive use of clerical staff in the central office is an area that may present itself with potential efficiencies on a go-forward basis. Given their proximity and similar job duties as described in available job descriptions, there is an opportunity to move towards a central pool of clerk staff to be shared among the different divisions, particularly between the CBO and other divisions within the Central Administrative Office. Therefore, the central administration should pursue a strategy to develop a central clerk pool and develop policies on how work is allocated among the staff. Given this will maximize the skills available throughout the central office and improve productivity, there will be future savings by reducing the number of total clerk positions necessary to perform clerical duties in the near future through an attrition model. As positions become vacant, they should remain unfilled to determine the impact of redistributing the workload among remaining clerical staff.

Consider Consolidating Controller Function with Sister Functions in City Administration - The City's Treasurer's Office is responsible for the overall accounting operations of the City, develops the standard operating procedures for the annual audit, cash management and all fund relationships. Its Comprehensive Annual Financial Report has received recognition by the GFOA (Government Finance Officers Association). It is well versed in preparing and maintaining its financial statements and its overall financial reporting systems for the City.

The School Department maintains a separate accounting system, where it pays its own bills, develops its own payroll, and runs its own checks. The Controller is responsible for the daily maintenance of the School district's accounting system, such as creating new and eliminating old accounts and posting transactions. The School Department's Controller's Office sends over warrants for payroll and accounts payable and the City wires the appropriate funds to the School Department's accounts. In other words, the City funds the School Department's obligations as they are incurred.

Given that both the City and the School Department operate similar functions, there is some duplication of work between the School Department and the City Administration. Therefore, consideration should be given to consolidating the two functions, and both entities would best be served if it were under the City administrative function. This will

permit the kind of synergies to take place to achieve savings, maintain efficient services, and eliminate duplicative activities. Again, the City must take a proactive role in ensuring that it is responsive to the school district's needs on a timely basis. As positions become vacant, they should remain unfilled to determine the impact of redistributing the workload among current remaining staff. The City should also consider conducting a salary survey of the positions to ensure there are no issues of pay equity.

Consider Consolidating Purchasing Function with Sister Function in City Administration - The School Department's purchasing function is responsible for developing and issuing requests for proposals per current bid requirements as outlined in its purchasing manual, monitoring and tracking purchase orders, and ensuring inventories are received. The purchasing function is not necessarily a function that is education-specific. In other words, the function itself is fairly generic regardless of the entity being served. Given that both the City and the School Department operate similar functions, there is some duplication of work between the School Department and the City Administration.

Therefore, consideration should be given to consolidating the two functions, and both entities would best be served if it were under the City administrative function. This will permit the kind of synergies to take place to achieve savings, maintain efficient services, and eliminate duplicative activities. The City must take a proactive role in ensuring that it is responsive to the School District's needs on a timely basis. This would include ensuring that policies are in place to enable the School Committee to maintain its role in monitoring and approving purchases made by the School Department.

The staffing and funding for the positions currently within the school district should be moved to the City. The City should not lay-off any positions that are part of the consolidation. Rather, as positions are vacated, they should remain unfilled to determine the impact of redistributing the workload among current remaining staff.

Explore Options to Consolidate Facilities Management Functions with City Administration - Within the school district's total FY 2005 operations expenditures, facilities accounted for about half. Expenditures increased on average annually by 3.4 percent, from $11.3 million in FY 2001 to $12.9 million in FY 2005. Expenditures for facilities accounted for the greatest share of growth in total operations expenditures. In other words, the majority of the growth within total operations in Warwick came from increased expenditures to upkeep facilities. Warwick spends $1,082 per pupil to support school facilities – the highest per pupil expenditure for facilities among the peer school districts in the benchmarking study. Warwick's spending was 20.2 percent higher than the next highest school district (East Providence at $900 per pupil).

The review of facilities was beyond the scope of this work, but as other work was performed, data suggested that this may prove to be a valuable analysis given the potential efficiencies that may result from such an action. There are considerable resources allocated to support school facilities, and an initial scan of personnel data shows staffing levels in excess of 150.0 FTE positions.

Monitor Implementation of RIPEC Recommendations – RIPEC recommends that the Warwick School Department develop and present to the School Committee, City Council and Mayor a status report on the implementation of the recommendations outlined in this Management Study, as well as updates on issues raised through the benchmarking exercise. This report should be presented no later than October 1, 2006.

II. Introduction

In August of 2005, the City of Warwick engaged RIPEC to direct the preparation of a five-year financial forecast of school spending and a benchmarking analysis that includes four peer Rhode Island school districts. The forecast will be used as a tool for the City and its school district to begin addressing any issues raised by the analysis. The benchmarking analysis will permit local policymakers and taxpayers to review how Warwick schools compare in terms of spending, revenue sources, student populations and performance, and can be used to raise questions regarding Warwick's relative position on certain issues. In addition, the City has requested that RIPEC review several key administrative issues facing the School Department. This includes an assessment of the Department's information technology status and needs as well as analysis of the central administrative office of the Department.

Work Plan

Baseline Analysis: In cooperation with the Advisory Group (listed below), the City Administration and the School Department, RIPEC developed a baseline of expenditure for the School Department's FY 2006 operating budget, including estimating spending needs, reviewing revenue collections and projecting year-end closing. This was used as the baseline for developing the five-year forecast.

Member	Association
Mayor Scott Avedisian	Mayor, City of Warwick
Robert Cushman	Chairman, Warwick School Committee
Robert Shapiro	Superintendent, Warwick Public Schools
Susan Stenhouse	Warwick City Council
Ernest Zmyslinski	Finance Director, City of Warwick

In cooperation with the Advisory Group, the School Department and City personnel, RIPEC collected information and evaluated the various aspects of each major expenditure and revenue activity in the School Department. This included interviews with key officials as well as a wide range of documentation. Examples of key documents reviewed included, but were not limited to:

- Operating Budgets;
- Detailed In$ite documentation;
- Annual Financial Reports and Auditor's Reports and Management Letters;
- Proposed employee labor agreements; and
- City tax base information (I.e. valuation data, overall revenue sources and yields).

Five-year Financial Forecast: The forecast includes an analysis and projections of school expenditures in order to identify the factors driving school spending. Revenue projections included all revenue items currently included in the School Committee's annual operating budget. The forecast was designed in a manner that will permit some degree of sensitivity analysis based on the assumptions used. In order to ensure the forecast reflected local needs, RIPEC asked the Advisory Group to:

- Review findings regarding the FY 2006 financial position;
- Review and assess assumptions used in the five-year forecast;
- Discuss and evaluate preliminary forecasts; and
- Review and comment on final RIPEC five-year forecast.

Per the request of the Advisory Group, two additional forecasts were developed to determine the relative impact of the two teacher contracts as currently proposed. In addition, RIPEC developed a preliminary financial impact of a new contract with WISE and non-union administrative personnel.

Benchmarking Analysis: The benchmarking analysis compares Warwick schools to four peer school districts in Rhode Island. Based on criteria suggested by RIPEC, the districts included in the benchmarking study were selected by the Advisory Group. The Advisory Group considered factors such as district size, socio-economic characteristics, and the community's economic base. The analysis benchmarked spending for student groups, major expenditure categories, revenues as well as the City's relative tax base and burden. RIPEC requested that the Advisory Group:

- Select four peer school districts to include in the benchmarking study;
- Identify key comparisons to be made as part of the benchmarking study (revenue trends, program costs, selected student performance measures, etc);
- Select the key characteristics to include in the socio-economic profiles of Warwick and the peer school districts (students, tax base, etc);
- Discuss and evaluate preliminary findings of the benchmarking study; and
- Review the RIPEC findings and analysis developed from the benchmarking study.

Management Practices: In its work, RIPEC also reviewed and analyzed the School Department's core administrative functions to determine if there are least cost options available to meet the administrative needs of the Department through alternative organizational changes or management practices. The two areas of concentration were the School Department's information technology operations and its central business office organizational structure and costs. RIPEC attempted to identify issues facing these functions, potential cost containment options, as well as appropriate action steps to implement proposed recommendations.

The following report summarizes the findings of the work presented to the Warwick Advisory Group. The report includes, but is not limited to:

- A status report of Warwick's FY 2006 School District operating budget;
- A forecast of School District revenue and spending patterns over a five-year period that includes a sensitivity analysis given certain assumptions, including a range of potential outcomes of the contract;
- A benchmarking analysis that includes Warwick and four Rhode Island school districts that reviews socio-economic, expenditure, revenue and performance; and
- An analysis of the School Department's information technology operations and needs as well as an analysis of the Department's central business office.

RIPEC would like to take this opportunity to thank a number of people for their support in developing this work. First, RIPEC appreciates the information and responsiveness of Mr. Robert Dooley, Warwick School Department's Director of Business Affairs. The information he provided was helpful in developing the RIPEC report. Second, to Ms. Suzanne McLaughlin of Unicom, Inc., who volunteered her expertise in developing the analysis of the district's information technology systems. Ms. McLaughlin's diligence in evaluating the district's IT readiness proved essential to this work. The business managers of the selected peer school districts were very responsive and helpful in collecting the data used in the benchmarking process. And finally, to the Advisory Group, whose patience and direction was critical to ensuring RIPEC provided an analysis that would add value to the issues discussed by Warwick's taxpayers.

III. Status Report of the FY 2006 Operating Budget

Overview of the Warwick School District – The Warwick school district provides educational services to approximately 12,000 elementary and secondary students – about 14.0 percent of its entire population. There are approximately 1,700 full time positions in the school department, with nearly 1,140 teachers (67.0 percent) and 560 staff (33.0 percent). The school district is run by an elected five-member school committee, with its school system supporting 20 elementary schools, 3 junior high schools, 3 high schools and one technical center.

The Superintendent develops the initial budget request for the School district, with the majority of the costs – salaries and personnel – done centrally through the central business office. The school committee discusses and amends the budget and the budget is submitted to the Mayor as a lump sum proposal. The Mayor then submits the school district budget to the City Council no later than 45 days prior to the beginning of the fiscal year for consideration. The City Council must adopt a budget by June 15. Any actions or adjustments made by the City Council are considered enacted and the School Department makes adjustments to meet the enacted budget.

It is important to note that the discussion on expenditures and revenues below does not represent the school department's entire budget. As most school departments in the State have done, the budget only reflects the general fund. In other words the budget does not include Federal funds, the school lunch program, or other funds derived from third parties, such as Champlin Foundation grants and other foundation funds. Therefore, the following analysis is somewhat incomplete given an all funds budget is not available. The additional funding sources are projected to total approximately $9.1 million in FY 2006, or 6.0 percent of an all funds budget.

FY 2006 Budget Baseline for the Warwick School District
(Millions)

Budget Items	FY 2005 Preliminary	FY 2006 District	FY 2006 RIPEC	FY 2006 Change
Expenditures				
Total Salaries	$86.7	$88.2	$87.1	($1.1)
Total Fringe Benefits	31.4	32.5	33.6	1.0
Sub-total Personnel	*$118.1*	*$120.8*	*$120.7*	*($0.1)*
Purchased Services	$14.3	$15.0	$14.8	($0.2)
Supplies and Equipment	4.4	4.8	4.6	(0.2)
Capital	0.9	1.2	1.0	(0.2)
Other	0.5	0.5	0.5	(0.0)
Sub-total - Operations	*$20.1*	*$21.5*	*$20.9*	*($0.6)*
Total Expenditures	$138.2	$142.2	$141.6	($0.7)
Revenues				
City Appropriation	$101.5	$103.1	$103.1	$0.0
Supplemental	2.0	2.7	0.2	(2.4)
State Aid	34.3	35.0	35.0	0.0
Federal Indirect Recovery	0.1	0.1	0.1	0.1
Local Revenues	2.9	3.7	3.6	(0.1)
Total Revenues	$140.8	$144.5	$142.1	($2.4)
Surplus (Deficit)	$2.6	$2.3	$0.5	

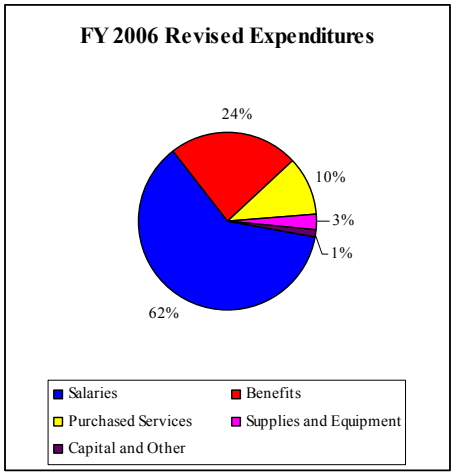
Source: RIPEC calculations based on Warwick School District Budget and Financial Statements

Overview of School District Spending Request – The Warwick School Department finished FY 2005 with approximately $138.2 million in spending. Total revenues for FY 2005 of $140.8 million resulted in an estimated surplus of $2.6 million. The School Department currently has a revised FY 2006 budget plan of $142.2 million, with $2.3 million of the surplus set aside for the resolution of the teacher contract. The FY 2006

revised plan includes adjustments recently made to support additional fuel costs and staff development. The School District's revised FY 2006 budget of $142.2 million represents a $4.0 million increase from FY 2005 experience ($138.2 million) – or 2.9 percent growth from FY 2005.

RIPEC has adjusted the FY 2006 spending plan to $141.6 million, representing a $664,000 reduction in programmed expenditures. The net increase over FY 2005 experience would be 2.5 percent. From this point forward, all references to the FY 2006 spending plan will refer to the RIPEC spending plan of $141.6 million.

The FY 2006 budget does not include any adjustments to incorporate potential costs and savings associated with a new teacher contract given agreement has yet to be reached. The only pool of resources currently under consideration is the $2.3 million set aside from the FY 2005 ending balance. However, the FY 2006 budget does include a 3.5 percent increase in salaries for classified employees, as well as 2 additional teachers and 2 additional teaching assistants – in part to provide the staff for a district-run special education class. As noted above, there have also been a number of adjustments within the budget to accommodate anticipated increases in fuel costs.

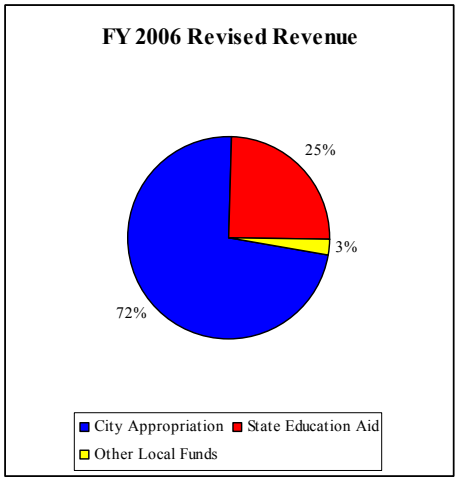


Of the $141.6 million in spending, the school department allocates $120.7 million or 86.0 percent to support direct personnel costs. This includes salaries, health care, pension and other benefits to support its staffing needs. The budget for personnel costs increased by 2.2 percent over FY 2005 actual experience, and represented 78.1 percent of the net increase for the entire operating budget. This includes the net impact of a 3.5 percent salary increase for classified employees, the savings incurred from recent pension reform, and growth in health care expenditures.

Salaries clearly represent the largest component of personnel costs, with $87.1 million used for salaries in FY 2006 – this includes an additional savings of $125,000 in anticipated turnover as recommended by RIPEC. Given that the majority of the school district's staff is made up of teachers, it is no surprise that nearly $63.4 million goes to support professional staff salaries. However, as noted above, classified salary expenditures reflect a 3.5 percent increase.

If one considers benefits only, benefits increased from $31.4 million in FY 2005 to $33.6 million in FY 2006 – a $2.2 million increase (7.0 percent growth). Benefits represent 24.0 percent of the school department's operating budget. The change in benefit costs is net of a number of changes, but the costs are primarily driven by two major factors. First, pension obligations continue to increase despite recent pension reform. As is the case statewide, this is driven by demographics and teachers retiring at earlier ages than in the past. The actuarial contribution increased from 14.84 percent in FY 2005 to 20.01

percent in FY 2006. This was partially offset by recent pension reform, saving the school district nearly $1.6 million in FY 2006. These savings will carry forward in the out-years. Second, health care costs will continue to grow, with the FY 2006 budget assuming an 8.0 percent increase in premium costs. RIPEC made an adjustment to the FY 2006 budget to cover anticipated health care costs – the FY 2006 budget as originally proposed appears to have understated expected experience per information provided by the school district's business office staff.



The second largest component of the school district budget is purchased services, where 10.0 percent ($14.8 million) is spent to support these expenditures. The single largest component of these expenditures is tuitions for special education. The school district projects these expenditures to total $7.3 million in FY 2006 – nearly half of all purchased services expenditures. The contract for transportation at $1.9 million is the second largest expenditure in this category.

Supplies and equipment represent the next largest component of the budget, with $4.6 million in budgeted expenditures for FY 2006 – approximately 3.0 percent of the total operating budget. The bulk of this spending is to support expenditures for heating fuel.

Capital outlays and other miscellaneous expenditures account for the remaining $1.5 million in the school department's budget. This is primarily to support information technology purchases and for liability insurance. The $1.5 million in spending represents approximately 1.0 percent of the entire operating budget.

Revenues supporting the School District's general fund are fairly straightforward. The $103.1 million City appropriation in FY 2006 represents nearly 72.0 percent of the revenues supporting the School District's spending program. FY 2006 State aid of $35.0 million represents approximately 25.0 percent of the revenues used to support general operations. The 3.0 percent balance includes funding from a variety of local sources, including the District's reimbursement for Medicaid-related expenditures, tuition, and building rentals.

RIPEC made modest adjustments to the proposed revenue plan in developing the baseline. First, RIPEC removed $2.3 million from the operating surplus and assumed this would be set aside in a reserve fund, thereby preventing erosion of these funds in the operating budget. This results in an actual balance to be brought forward into the FY 2006 spending plan of $238,000. Second, it appears that the School Department will be able to enhance its indirect cost recoveries per discussion with RIPEC and adjustments made to grant applications for an additional $70,000, and Medicaid reimbursements are projected to bring in $100,000 less than originally forecast.

The adjustments to the FY 2006 revenue and expenditure plans as recommended by RIPEC result in a net impact of an ending balance of $522,000. It should be noted that since FY 2000, the school department has experienced ending balances ranging from $144,000 in FY 2000 to $2.6 million in FY 2005, averaging approximately $1.2 million during this period. These ending balances represent approximately 1.5 percent of operating budgets during this period.

Warwick School Department Operating Budget
Average Surplus Funds (Millions)

Fiscal Year	General Fund Expenditure	Change	Ending Balance	Percent of Expenditure
2000	$111.1		$0.1	0.1%
2001	116.4	4.8%	0.8	0.7%
2002	123.9	6.4%	1.4	1.1%
2003	132.4	6.9%	0.7	0.5%
2004	135.2	2.1%	2.0	1.5%
2005	138.2	2.3%	2.6	1.9%
2006 (a)	141.6	*2.4%*	0.5	*0.4%*
Average Surplus:			**$1.2**	

(a) RIPEC baseline forecast of expenditures

Source: RIPEC calculations based on City Financial Statements

IV. Five Year Forecast

The following section provides a series of five-year financial projections to provide School and City policymakers with a tool to identify issues that may arise in the near future. A forecast is designed to provide a baseline fiscal outlook for Warwick taxpayers. While a forecast is a useful benchmark to assess various policy options, a forecast is only as good as the assumptions it is built upon.

In summary, RIPEC projects a baseline spending plan in FY 2006 of $141.6 million – about $600,000 less than enacted. The baseline forecast assumes no contracts are in place. From this baseline, RIPEC projects spending will grow at an average annual rate of 1.8 percent to a budget of $154.8 million in FY 2011. The principle budget drivers are the related health care and pension costs for teachers and administrators. Revenues are projected to increase at an average annual rate of growth of 1.0 percent. This revenue forecast does not include any projected growth in the local appropriation (it is level funded at the FY 2006 level) and includes a 3.0 percent annual increase in state aid. This results in estimated operating deficits beginning in FY 2007 of approximately $1.0 million, increasing to $6.1 million by FY 2011. As the discussion below demonstrates, there are many variables to consider that could affect this estimate in either direction.

Should the school committee and union reach agreement, the impact will be significant. For example, the impact could range from approximately $13.6 million in FY 2007 per the proposal outlined by the school committee to $22.9 million in FY 2007 as currently outlined by the union proposal. These estimates include net retro-payments for compensation related to previous fiscal years. These forecasts would be in addition to the projections noted above in the baseline budget. Therefore, this would require service and spending reductions and additional resources in order to maintain balanced budgets. Additional details regarding these forecasts are provided below.

Forecast Assumptions

One should consider the following risks when developing a forecast – the economic outlook, external actions taken (State tax policy, non-local aid distributions and school funding decisions), and City and School District policies (Contract negotiations and debt management). Clearly the economy is a moving target in that changes occur often. A forecast cannot anticipate future actions taken by the State or Federal government or how they might affect Warwick revenues and expenditures. Therefore, the forecast assumes current law and relies on existing economic forecast data from the State's Revenue Estimating Conference. Finally, the School District could enact policies or redirect resources to a range of priorities. The forecast assumes no major shifts or changes to policies currently in place in the school district.

The baseline forecast is necessary to have as a benchmark. The baseline forecast isolates expenditures given no contract is in place. Therefore, the baseline forecast essentially shows the natural growth of spending outside of negotiations. Projected health care costs, known pension obligations, and the natural growth in the cost of doing business are incorporated into the baseline.

The following analysis includes a number of variables to develop a picture of the School District's revenue and expenditure structure. Some of the data relied upon is based on data reported by the School District and the City, while others are RIPEC estimates. The following outlines some assumptions and related data used in the forecast:

Revenue Structure

The following estimates various components of the School district's revenue structure in order to build a forecast for policy decisions. Again, this only represents an estimate of the School District's resources over the next five years. However, changes in the economy and/or State and local policy could have a significant impact on this analysis. The following discusses in detail the assumptions used in developing the forecast.

City Appropriations: Property taxes will continue to be the largest single-source of revenue for the School District. Given the modest growth in state aid, the City has provided the majority of the operating resources. In fact, City appropriations represent 72.0 percent of the school district budget, while state aid represents 24.0 percent of the operating budget. The baseline forecast does not include any growth in the City appropriation for school spending. This provides a clear picture of the expenditure forecast excluding policy choices made by City officials.

State School Aid to the City of Warwick – How the State will handle school aid in the near future is difficult to forecast. Since FY 1995, the State has distributed school aid on an annual, ad-hoc basis, with little predictability in the amount and method for distribution. While the State has increased State aid over the past decade by more than $300.0 million, the rate of increase has begun to decline. In FY 2006, the State increased aid by 3.8 percent, while aid to Warwick increased by 3.3 percent. However, on average, Warwick's school aid has grown by nearly 3.0 percent during this period of time. RIPEC has assumed an average annual rate of growth in state aid of 3.0 percent.

Miscellaneous Revenues – Miscellaneous revenues, such as tuition and fees, are projected to increase by personal income growth per the State's November Economic Forecast. This appears to be consistent with recent experience with these funding sources.

Medicaid Reimbursement – The City receives over $2.0 million in Medicaid reimbursements, primarily for expenditures related to special education costs. RIPEC assumed an annual growth rate of 5.0 percent over the forecast period.

Expenditure Structure

Education expenditures are clearly the largest single component of the City of Warwick's budget – representing nearly 60.0 percent of all City spending. The changes made in this function of local government play the greatest role in how the City manages its finances. Estimating School District expenditures is certainly a difficult process. Given the school system is primarily funded with property taxes and State aid, how the City's property tax base performs and how the State's overall fiscal health evolves will be critical. The following forecast is designed to provide a tool to get a feel for the impact financial decisions today will have on the School District's fiscal health tomorrow.

FY 2006 Baseline: The forecast relies on the RIPEC analysis of the FY 2005 actual experience and the FY 2006 enacted budget to establish a baseline for projections. The school department finished FY 2005 with an operating surplus of nearly $2.6 million, of which $240,000 is projected to support training and fuel costs. RIPEC also assumes that the remaining $2.3 million is set aside outside of the operating budget for future contract costs. Therefore, these funds are not included in the FY 2006 baseline budget. The five-year forecast is benchmarked to the FY 2006 budget adjusted by RIPEC.

RIPEC has made a number of modifications to the FY 2006 enacted budget based on recent spending patterns, past experience with operating surpluses, and spending to date. RIPEC has reduced the FY 2006 projected level of spending by $663,705, of which $125,000 would come from additional turnover and $540,000 come from non-personnel expenditures. This is offset in part by an additional $145,000 in net new spending, primarily to account for projected health care experience. RIPEC believes there may be additional savings in personnel due to slippage and other savings over the course of the year, but has not suggested removing these savings so that the school department has adequate flexibility to meet any other needs as they arise. However, the proposed adjustments to the baseline do impact the five year forecast.

Salaries: RIPEC assumed no Cost of Living Adjustments (COLAs) for professional, classified or administrative staff throughout the forecast period. As noted earlier, the teacher's contract is still under negotiation, and the contract for classified employees expires at the close of FY 2006. As for longevity, RIPEC has assumed a 2.15 percent annual rate of growth related to longevity for the professional staff, and 0.5 percent for classified personnel. Turnover expectations are projected at 1.5 percent for professional staff and 1.3 percent for both classified and administration employees.

Health and Dental Insurance: Health insurance premiums, which are currently borne entirely by the School district, are projected to increase by 8.0 percent in FY 2007 and thereafter based on previous growth rates and projected growth in sample communities across the State. The contract for dental insurance expires at the close of FY 2006. It is difficult to forecast what the new contract may include. However, for planning purposes, dental costs are projected to increase at an average annual rate of 3.0 percent, which is slightly more than expected growth in the CPI (Consumer Price Index).

Pension Contributions: Pension contributions for professional staff are based on contribution rates provided by the State's actuary. The Warwick School Department is responsible for contributing 60.0 percent of the annual employer pension obligation (State provides 40 percent difference), which is projected to exceed 21.0 percent of eligible salaries in FY 2008, of which Warwick would have to provide 12.6 percent. This does not take into account the Governor's recent proposal to increase the state's share of pension contributions from 40.0 percent to 50.0 percent. Pension contributions for classified employees are based on an actuarially determined amount each year. However, this data is not available yet, and therefore RIPEC has forecast an estimated amount based on a percentage of salaries. This was estimated at 8.1 percent of classified salaries.

FICA: The RIPEC forecast assumes a FICA contribution of 7.65 percent for all salaries. This includes 6.2 percent of salaries up to $94,200 for social security and 1.45 percent for Medicare that is applied to all taxable compensation. While this is likely to represent slightly more than what will be necessary given that the social security tax applies to the first $94,200 in salaries, this still provides a reasonable estimate of what the costs would be given projected salaries.

Inflation and Personal Income: Inflation figures are based on the Consumer Price Index (CPI), which is agreed upon through the consensus forecast produced by the State's November Revenue and Caseload Estimating Conference. Personal income growth figures are based on the forecast developed by the State's November Revenue and Caseload Estimating Conference.

Annual Spending Choices: The City Administration, City Council and School Committee make decisions annually that impact future finances of the City. These can range from certain capital projects, school operations or facilities and other issues that are deemed appropriate. There are no assumptions regarding any changes in City or school district policy in spending priorities.

Baseline Forecast

RIPEC projects a baseline FY 2006 expenditure plan of $141.6 million – about $522,000 less than anticipated revenues ($142.1 million). From this baseline, RIPEC projects spending will grow at an average annual rate of 1.8 percent to a projected budget of $154.8 million in FY 2011. Revenues are projected to increase at an average annual rate of growth of 1.0 percent. This revenue growth does not include any projected growth in the local appropriation, but does include a 3.0 percent annual increase in state aid. This results in estimated operating deficits beginning in FY 2007 of approximately $1.0 million, increasing to $6.1 million by FY 2011. The following discussion regarding the teacher contracts all discuss the impact relative to this baseline.

Contract Proposals

The School District is currently negotiating contract provisions, which will impact salaries, medical benefits, time-off and other related costs. Given that it is impossible to know what will be agreed upon during this process, the baseline forecast does not take into account potential changes in compensation agreed to in contract negotiations.

There will be significant financial implications for the City if a teacher contract is reached given the school district is in its third year of operation without a contract. Therefore, as requested by the Advisory Group, the following forecasts include two sensitivity components to test the potential impact of a contract agreement. The first alternative represents the latest proposal put forth by the Warwick School Committee. This outlines the estimated net impact of such a contract should such a contract be reached. The second alternative represents the latest proposal put forth by the Warwick Teacher's Union over the same period of time. Both RIPEC forecasts assume that the contract would be settled so that the City and school district would have to make any net retro-payments in FY 2007 for any compensation agreed upon for prior fiscal years.

Warwick School Department
Estimated Five Year Financial Forecast - Baseline

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Expenditures						
Personnel	$120.7	$122.9	$125.5	$127.6	$129.5	$131.5
Retropayment	0.0	0.0	0.0	0.0	0.0	0.0
Purchased Services	14.8	15.2	15.5	15.8	16.2	16.5
Supplies/Equipment	4.6	4.7	4.8	4.9	5.0	5.1
Capital	1.0	1.0	1.0	1.1	1.1	1.1
Other	0.5	0.5	0.5	0.5	0.5	0.5
Total Expenditure	*$141.6*	*$144.3*	*$147.3*	*$150.0*	*$152.3*	*$154.8*
Growth		*2.0%*	*2.1%*	*1.8%*	*1.6%*	*1.6%*
Revenues						
Local Appropriation	$103.4	$103.4	$103.4	$103.4	$103.4	$103.4
State Aid	35.0	36.1	37.2	38.3	39.4	40.6
Federal indirect	0.1	0.1	0.1	0.1	0.1	0.2
Other Local Revenues	3.6	3.8	3.9	4.1	4.3	4.5
Revenues	*$142.1*	*$143.3*	*$144.6*	*$145.9*	*$147.3*	*$148.7*
Growth		*0.9%*	*0.9%*	*0.9%*	*0.9%*	*0.9%*
Net Surplus (Deficit)	**$0.5**	**($1.0)**	**($2.7)**	**($4.0)**	**($5.1)**	**($6.1)**

Source: RIPEC calculations

The following table outlines the differences between the two proposals in terms of changes in base salary, longevity, pay for degrees, and others. As the table shows, there are some noteworthy differences in the proposals which have considerable impact on the overall financial implications of a contract. It should be noted that the RIPEC forecast is through FY 2011. Current contract proposals only go through FY 2009. Therefore, RIPEC used current proposals as a benchmark to develop assumptions for the out years.

There is a significant financial impact on the City's taxpayers regardless of the contract agreed upon by the school committee and the union. At a minimum, RIPEC estimates that the budget will be $13.6 million more in FY 2007 than currently projected, with a maximum of approximately $22.9 million. This includes one-time net retro-payments for compensation agreed upon for prior fiscal years of $4.3 million or $9.7 million respectively. Out-year obligations widen depending on the contract agreed upon, with the school committee contract requiring an additional $18.4 million in spending by FY 2011, as compared to $26.9 million based on the teachers' contract proposal.

Contract Proposal Variables

Proposal	Base Pay		Longevity		Degrees		Other	
	School Committee	Teacher Union	School Committee	Teacher Union	School Committee	Teacher Union	School Committee	Teacher Union
2004	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2005								
- first day	3.0%	4.0%	0.0%	26.0%	0.0%	14.0%	0.0%	10.0%
- 91st day	1.0%		0.0%		0.0%		0.0%	
2006								
- first day	2.0%	4.0%	2.0%	13.0%	2.0%	8.0%	2.0%	10.0%
- 91st day	2.0%		2.0%		2.0%		2.0%	
2007								
- first day	2.0%	4.5%	2.0%	12.0%	2.0%	7.0%	2.0%	10.0%
- 91st day	2.0%		2.0%		2.0%		2.0%	
2008	3.0%	4.0%	3.0%	7.0%	3.0%	5.0%	3.0%	10.0%
2009	3.5%	4.0%	3.5%	7.0%	3.5%	4.0%	3.5%	10.0%
2010	*3.0%*	*4.0%*	*3.0%*	*4.0%*	*3.0%*	*4.0%*	*3.0%*	*10.0%*
2011	*3.0%*	*4.0%*	*3.0%*	*4.0%*	*3.0%*	*4.0%*	*3.0%*	*10.0%*

Note: FY 2010 and FY 2011 are RIPEC estimates for forecasting purposes given current contract proposals only extend through FY 2009

Source: Warwick School Department - Business Office

Cumulatively, the School Committee's contract proposal will require approximately $73.7 million more in spending over the forecast period (compared to baseline). The teacher union contract proposal will require an additional $109.6 million more than the baseline forecast during this period. The teacher union contract proposal would require $35.9 million more than the school committee contract during the forecast period, which is nearly 50 percent more in resources.

Clearly there will be some additional negotiation and neither contract proposal will remain static. However, RIPEC believes this forecast does provide a reasonable estimate of what the potential impact the contracts will have on school spending in the City of Warwick.

School Committee Proposal

The School Committee has proposed the following compensation program to the teachers' union (as of January 2006). The School Committee has proposed no salary adjustment for FY 2004, a 3.0 percent adjustment the first day of FY 2005 and an additional 1.0 percent on the 91st day (translating to an overall rate increase of 4.0 percent). For fiscal years 2006 and 2007, a 2.0 percent adjustment is proposed for the first day and an additional 2.0 percent on the 91st day (translating to an overall rate increase of 4.0 percent). For FY 2008, a 3.0 percent salary adjustment is proposed and a 3.5 percent increase in FY 2009.

Warwick Operating Budget Forecasts (Expenditures)

				Difference From Baseline	
Fiscal Yr	**Baseline**	**Committee**	**Union**	**Committee**	**Union**
2006	$141.6	$141.6	$141.6	$0.0	$0.0
2007	*144.3*	***158.0***	***167.2***	*13.6*	*22.9*
2008	147.3	158.8	163.9	11.5	16.5
2009	150.0	164.0	169.9	14.1	19.9
2010	152.3	168.6	175.7	16.2	23.4
2011	154.8	173.2	181.7	18.4	26.9
			Net Impact:	$73.7	$109.6

Source: RIPEC estimates based on range of assumptions

For pay related to longevity, degrees, coaching and extra curricula activities, the School Committee has proposed the following compensation program to the teachers' union (as of January 2006). The School Committee has proposed no adjustments for fiscal years 2004 and 2005. For fiscal years 2006 through 2009, the school committee has proposed the same compensation program as noted above for base pay.

The school committee has also proposed initiating a 10 percent co-share of medical premiums beginning in FY 2006. According to the School Department, this is an estimated $1.0 million savings in FY 2006. For forecasting purposes, the remainder of the forecast period (fiscal years 2010 and 2011) assumes a 3.0 percent annual increase in base pay, longevity, degrees, coaching and extra curricula activities. It also assumed the 10 percent co-share remains in effect for the forecast period, growing at the same rate as overall medical costs (8.0 percent).

RIPEC's forecast shows that the FY 2007 operating budget would require an additional $13.6 million than projected based on the FY 2007 baseline budget of $144.3 million. The $158.0 million in projected spending includes a net retro-payment of approximately $4.3 million. The retro-payment is net of a FY 2006 10 percent co-share for medical premiums, and includes pension contributions and FICA for this additional salary cost. The $9.4 million net increase over the FY 2007 baseline forecast (excludes the retro-payment) re-adjusts the personnel base for base pay, longevity, degrees, coaching and extra curricula changes as proposed by the school committee.

In other words, if one adjusts out the retro-payment, the FY 2007 baseline spending program based on the school committee's proposal would be approximately $153.7 million. This would be 6.5 percent higher than the baseline budget. RIPEC projects the total spending plan to increase to $173.2 million by FY 2011 – approximately 12.0 percent higher than the baseline projection.

Warwick School Department

Estimated Five Year Financial Forecast - School Committee

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Expenditures						
Personnel	$120.7	$132.3	$137.0	$141.7	$145.7	$149.9
Retropayment	0.0	4.3	0.0	0.0	0.0	0.0
Purchased Services	14.8	15.2	15.5	15.8	16.2	16.5
Supplies/Equipment	4.6	4.7	4.8	4.9	5.0	5.1
Capital	1.0	1.0	1.0	1.1	1.1	1.1
Other	0.5	0.5	0.5	0.5	0.5	0.5
Total Expenditure	*$141.6*	*$158.0*	*$158.8*	*$164.0*	*$168.6*	*$173.2*
Growth		*11.6%*	*0.5%*	*3.3%*	*2.8%*	*2.8%*
Revenues	*$142.1*	*$143.3*	*$144.6*	*$145.9*	*$147.3*	*$148.7*
Growth		*0.9%*	*0.9%*	*0.9%*	*0.9%*	*0.9%*
Net Surplus (Deficit)	**$0.5**	**($14.6)**	**($14.2)**	**($18.1)**	**($21.3)**	**($24.5)**
Impact from Baseline	$0.0	$13.6	$11.5	$14.1	$16.2	$18.4

Source: RIPEC calculations

Teacher Union Proposal

The teachers' union has proposed the following compensation program to the school committee (as of January 2006). The union has proposed a 3.5 percent salary adjustment for FY 2004, a 4.0 percent adjustment for fiscal years 2005 and 2006, a 4.5 percent increase for FY 2007 and 4.0 percent for fiscal years 2008 and 2009.

For pay related to longevity, degrees, coaching and extra curricula activities, the union has proposed several different compensation adjustments. For longevity, the union has proposed no adjustment for FY 2004, 26.0 percent in FY 2005, 13.0 percent for FY 2006, 12.0 percent for FY 2007 and 7.0 percent for fiscal years 2008 and 2009. For degree compensation, the union has proposed no adjustment for FY 2004, 14.0 percent in FY 2005, 8.0 percent for FY 2006, 7.0 percent for FY 2007, 5.0 percent for FY 2008 and 4.0 percent in FY 2009. For coaches and extra curricula activities, the union has proposed no adjustment for FY 2004 and 10.0 percent adjustments annually from FY 2005 through FY 2009.

The teachers' union has also proposed to add family health care coverage for life for retirees. While this is likely to require significant resources to fund, it is difficult to estimate such a provision. Therefore, the RIPEC forecast has not included this provision in the forecast. For forecasting purposes, the remainder of the forecast period (fiscal

years 2010 and 2011) assumed a 4.0 percent annual increase in base pay, longevity, degrees, and extra curricula activities. Coaching compensation was assumed to continue to increase at 10 percent as proposed by the union. There is no co-share of medical premiums included in the union contract proposal forecast.

Warwick School Department
Estimated Five Year Financial Forecast - Teacher Union

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Expenditures						
Personnel	$120.7	$136.1	$142.0	$147.6	$152.9	$158.4
Retropayment	0.0	9.7	0.0	0.0	0.0	0.0
Purchased Services	14.8	15.2	15.5	15.8	16.2	16.5
Supplies/Equipment	4.6	4.7	4.8	4.9	5.0	5.1
Capital	1.0	1.0	1.0	1.1	1.1	1.1
Other	0.5	0.5	0.5	0.5	0.5	0.5
Total Expenditure	*$141.6*	*$167.2*	*$163.9*	*$169.9*	*$175.7*	*$181.7*
Growth		*18.1%*	*-2.0%*	*3.7%*	*3.4%*	*3.4%*
Revenues	*$142.1*	*$143.3*	*$144.6*	*$145.9*	*$147.3*	*$148.7*
Growth		*0.9%*	*0.9%*	*0.9%*	*0.9%*	*0.9%*
Net Surplus (Deficit)	**$0.5**	**($23.9)**	**($19.3)**	**($24.0)**	**($28.5)**	**($33.1)**
Impact from Baseline	$0.0	$22.9	$16.5	$19.9	$23.4	$26.9

Source: RIPEC calculations

RIPEC's forecast shows that the FY 2007 operating budget would require an additional $22.9 million than projected based on the FY 2007 baseline budget of $144.3 million. The $167.2 million in projected spending includes a net retro-payment of approximately $9.7 million. This includes pension contributions and FICA. The $13.2 million net increase over the FY 2007 baseline forecast (excludes the retro-payment) re-adjusts the personnel base for base pay, longevity, degrees, coaching and extra curricula changes as proposed by the teacher union. In other words, if one adjusts out the retro-payment, the FY 2007 baseline spending program based on the teachers' union proposal would be approximately $157.5 million. This would be 9.1 percent higher than the baseline budget. RIPEC projects the total spending plan to increase to $181.7 million by FY 2011 – approximately 17.4 percent higher than the baseline projection.

WISE Contract

The forecasting model developed by RIPEC permits additional sensitivity analysis, including estimating the potential impact a successful WISE contract might have on the school department's operating budget. Therefore, in addition to the two contract

proposals above, RIPEC also took a moment to forecast the potential impact of the next contract set forth for the school district's classified employees. If one assumes a COLA of 3.0 percent each year for the forecast period and a 10 percent co-share on health care costs, RIPEC projects a net increase in obligations of $256,000 in FY 2007, growing to $2.9 million by FY 2011. As noted, this is net of the 10 percent co-share assumed in the forecast. The co-share has a projected impact of approximately $400,000 less in school district spending obligations in FY 2007 and would grow to $544,000 by 2011 given it would increase at the same rate as overall health care costs (8.0 percent). The 3.0 percent annual COLA is projected to require $656,000 in FY 2007 (includes impact on FICA and retirement) and would increase to a net impact of $3.4 million by FY 2011.

Warwick School Department

Estimated Five Year Financial Forecast - WISE and Admin

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Expenditures						
Personnel	$120.7	$123.3	$126.7	$129.6	$132.3	$135.1
Retropayment	0.0	0.0	0.0	0.0	0.0	0.0
Purchased Services	14.8	15.2	15.5	15.8	16.2	16.5
Supplies/Equipment	4.6	4.7	4.8	4.9	5.0	5.1
Capital	1.0	1.0	1.0	1.1	1.1	1.1
Other	0.5	0.5	0.5	0.5	0.5	0.5
Total Expenditure	*$141.6*	*$144.7*	*$148.5*	*$151.9*	*$155.1*	*$158.4*
Growth		*2.2%*	*2.6%*	*2.3%*	*2.1%*	*2.1%*
Revenues	*$142.1*	*$143.3*	*$144.6*	*$145.9*	*$147.3*	*$148.7*
Growth		*0.9%*	*0.9%*	*0.9%*	*0.9%*	*0.9%*
Net Surplus (Deficit)	**$0.5**	**($1.4)**	**($3.9)**	**($6.0)**	**($7.9)**	**($9.7)**
Impact from Baseline	$0.0	$0.4	$1.2	$2.0	$2.8	$3.6

Source: RIPEC calculations

If a similar COLA were also put in place for administrators outside of the contracts discussed above, the potential impact of the 3.0 percent COLA would be approximately $140,000 in FY 2007 and would increase to an additional $710,000 in FY 2011. Non-union administrators already have a 10.0 percent co-share for health care, which is included in the baseline. Therefore, as shown on the table below, it is estimated that the WISE contract and the impact on non-union administrators combined would increase the baseline costs in FY 2007 by approximately $400,000, and would increase to $3.6 million in additional costs by FY 2011.

V. Benchmarking Analysis

Benchmarking is a process in which an organization compares its performance to others, and then uses the information to evaluate its own performance. It is a mechanism for deploying resources in the most effective manner to achieve success.

A benchmarking analysis is designed to answer the following:

- What are we doing, and what are they doing?
- How are we doing it, and how are they doing it?
- How well are we doing it, and how well are they doing it?
- Why are we getting our results, and why are they getting their results?

The information so obtained can help management identify areas and activities that might need to be addressed in order to enhance the value of services being provided.

In order to understand how the Warwick School District is doing relative to peer school districts in Rhode Island, it is helpful to perform a number of comparative analyses. This section compares the Warwick School District with four other school districts in Rhode Island. In selecting school districts to compare Warwick, the Warwick Advisory Council reviewed spending patterns, enrollment and economic data, as well as overall demographics. After evaluating all characteristics, the Advisory Council chose the following peer school districts: Cranston, East Providence, North Providence, and Pawtucket.

This analysis focuses on four areas:

- Student Enrollment Trends – Provides data on student enrollment, such as total fall enrollment, limited English proficiency, special education, and eligibility for free and reduced lunches;
- Expenditure Trends – Reviews various expenditure trends by programs (general education, special education, English as a second language, Title I, vocational education, and other programs) and functions (instruction, instructional support, operations, other commitments, and leadership), and provides per pupil expenditure trends;
- Revenue Trends – Documents the source (federal, state, local) and the amount of revenues, as well as property values, tax levy, and effective tax rates; and
- Student Performance Trends – Evaluates student performance on the Scholastic Assessment Test (SAT), and Rhode Island's New Standards Reference Exam (NSRE).

1. Student Enrollment Trends

Summary of Enrollment Trends

- From FY 2001 to FY 2005, Warwick's student enrollment experienced a net decline of 373 students, representing a net decline of 3.0 percent during that period. Student enrollment declined from 12,265 in FY 2001 to 11,892 in FY 2005;

- All peer districts except Cranston experienced a declining enrollment between 2001 and 2005, ranging from a decline of 0.5 percent of students in North Providence to a decline of 8.4 percent in East Providence. Cranston experienced a 0.5 percent increase in student enrollment between 2001 and 2005;

- In Warwick, the number of children requiring special education services increased from 2,351 students in FY 2001 to 2,464 in FY 2005 –an increase of 4.8 percent;

- In FY 2001, the special education enrollment represented 19.2 percent of the total student enrollment in Warwick. The percentage of enrollment for special education has increased to 20.7 percent in FY 2005, compared to a statewide average of 20.1 percent;

- Special education enrollment as a percent of total enrollment ranged from a high of 23.9 percent in East Providence to a low of 18.5 percent in North Providence in 2005; The State average was 20.1 percent of special education enrollment;

- While Warwick's enrollment has declined overall, a higher percentage of students is eligible for free and reduced lunches. Eligibility for free and reduced lunch programs increased from 2,096 children in FY 2001 to 2,462 in FY 2005. The percentage of total enrollment eligible for the subsidized lunch programs increased from 17.1 percent in FY 2001 to 20.7 percent in FY 2005 compared to a state average of 34.5 percent;

- When compared to its peers, Warwick's growth rate of 17.5 percent between 2001 and 2005 in eligibility for free and reduced lunches was second highest among its peers. Only North Providence was higher, increasing eligibility for free and reduced lunch by 17.8 percent. During this time period, the State average increased by 1.5 percent;

- Warwick's percentage of students enrolled in limited English proficiency programs as a percentage of total enrollment was at 0.8 percent in FY 2005, the same level than in FY 2001. In FY 2005, Warwick had 92 students enrolled in these programs; and

- Among its peers, Warwick had the lowest percentage of students enrolled in limited English proficiency programs as a percentage of total enrollments. The percentage ranged from an estimated low of 0.8 percent of total enrollment in Warwick to an estimated high of 10.9 percent in Pawtucket in 2005.

The characteristics of school districts begin with examining the student enrollment. The core of school funding is driven by enrollment patterns, student needs and teaching requirements. As one can see on the table below Warwick's overall enrollment declined by 3.0 percent (373 students) between FY 2001 and FY 2005. During the same time period, enrollment for special education programs increased by 4.8 percent (113 students), and eligibility for free and reduced lunch programs increased by 17.5 percent (366 students). The percentage of students eligible for subsidized lunch programs increased by almost four percentage points, to 20.7 percent of total enrollment in FY 2005. Enrollment in limited English programs was at 0.8 percent (92 students) of total enrollment in FY 2005, the same level as in FY 2001.

Warwick School Enrollment

	Total	Special Ed		Free/Reduced Lunch		LEP	
	Amount	Amount	% of Total	Amount	% of Total	Amount	% of Total
FY 2001	12,265	2,351	19.2%	2,096	17.1%	93	0.8%
FY 2005	11,892	2,464	20.7%	2,462	20.7%	92	*0.8%*
2001-05 Change							
Amount	(373)	113		366		-	
Percent	-3.0%	4.8%		17.5%		-1.1%	

Source: RI Dept. of Education and RIPEC calcuations.

Student Enrollment

Statewide, enrollment declined by 1.7 percent or 2,679 students from FY 2001 to FY 2005. Enrollment declined from 156,275 in FY 2001 in public schools to 153,596 in FY 2005. One should note that enrollment numbers do not include enrollment in state-run and charter schools. The declining enrollment is partially attributable to the change in the kindergarten entrance age. In September 2004, the new entrance age went into effect, moving the cutoff date from age five by December 31st to age five by September 1st, meaning that the class was drawn from only an 8-month birthday span. Statewide, kindergarten enrollment declined by 23.7 percent (1,507 students) between FY 2004 and FY 2005. Even assuming that kindergarten enrollment did not decline between 2004 and 2005, RIPEC estimates that overall statewide enrollment would have declined by 1,177 students (0.8 percent) between FY 2001 and FY 2005.

From FY 2001 to FY 2005, Warwick's student enrollment declined by 373 students, representing a decline of 3.0 percent during that period. Student enrollment declined from 12,265 in FY 2001 to 11,892 in FY 2005. Warwick's enrollment would still be declining even when assuming that kindergarten enrollment did not decline between 2004 and 2005. Adjusting for this change, RIPEC estimates that Warwick's enrollment would have declined by 233 students (1.9 percent) between FY 2001 and FY 2005.

Among the peer school districts, Warwick is the largest school district, followed by Cranston with 11,099 students in FY 2005. All of the surveyed districts experienced a net decline in student enrollment between FY 2001 and FY 2005 except Cranston, which saw

a slight increase. On a percentage basis, East Providence experienced the greatest decline. This district saw a decline of 8.4 percent (557 students), from 6,605 students in FY 2001 to 6,048 in FY 2005.

Fall Enrollment for Public Schools

Community	2000-01	2001-02	2002-03	2003-04	2004-05	2001-2005 Change Amount	2001-2005 Change Percent
Cranston	11,040	11,155	11,269	11,222	11,099	59	0.5%
East Providence	6,605	6,566	6,442	6,386	6,048	(557)	-8.4%
North Providence	3,549	3,476	3,445	3,473	3,533	(16)	-0.5%
Pawtucket	10,069	9,833	9,888	9,654	9,476	(593)	-5.9%
Warwick	**12,265**	**12,222**	**12,085**	**11,993**	**11,892**	**(373)**	**-3.0%**
State Total	**156,275**	**156,624**	**157,201**	**156,997**	**153,596**	**(2,679)**	**-1.7%**

Source: RI Dept. of Education and RIPEC calculations.

In analyzing enrollment trends it is important to understand the demographic make-up of the student population and how it has changed. The following discusses enrollment in special education, children eligible for free and reduced lunch and children requiring language assistance programs.

Special Education

Statewide, the number of children requiring special education services increased from 30,214 in FY 2001 to 30,839 in FY 2005. This represented a 2.1 percent increase. The percentage of children requiring special education as a percent of all students increased from 19.3 percent in FY 2001 to 20.1 percent in FY 2005.

In Warwick, the number of children requiring special education services increased from 2,351 students in FY 2001 to 2,464 in FY 2005 – translating into a growth rate of 4.8 percent during that time period. In FY 2001, the special education enrollment represented 19.2 percent of the total student enrollment in Warwick, which was at the statewide average of 19.3 percent. Given the rate of growth in special education student population, coupled with an overall decline in enrollment in the City, the percentage of enrollment for special education has increased to 20.7 percent in FY 2005, compared to a statewide average of 20.1 percent.

Special Education Enrollment for Public Schools

Community	2000-01	2001-02	2002-03	2003-04	2004-05	2001-2005 Change Amount	2001-2005 Change Percent
Cranston	2,158	2,183	2,274	2,286	2,352	194	9.0%
East Providence	1,237	1,365	1,379	1,395	1,446	209	16.9%
North Providence	738	802	700	670	653	(85)	-11.5%
Pawtucket	2,025	2,108	2,219	2,131	1,839	(186)	-9.2%
Warwick	**2,351**	**2,451**	**2,647**	**2,260**	**2,464**	**113**	**4.8%**
State Total	**30,214**	**31,360**	**32,178**	**31,674**	**30,839**	**625**	**2.1%**

Source: RI Dept. of Education and RIPEC calculations.

Between FY 2001 and FY 2005 special education expenditures in Warwick increased by 32.0 percent, while enrollment increased by 4.8 percent during that time period. In other words, special education expenditures grew at a faster rate than enrollment (see also discussion in the expenditure section).

When compared to the four surveyed districts, Warwick ranked third in special education enrollment as a percentage of total enrollment. Special education ranged from a high of 23.9 percent of total enrollment in East Providence to a low of 18.5 percent in North Providence. East Providence experienced the highest percentage increase among the surveyed districts, in part due to East Providence's greatest decline in total enrollment among the peers. East Providence's special education enrollment increased by 16.9 percent (209 students), from 1,237 in FY 2001 to 1,446 in FY 2005. Both, North Providence and Pawtucket experienced a decline in special education enrollment between FY 2001 and FY 2005, declining by 11.5 percent (85 students) and 9.2 percent (186 students) respectively.

Special Education as a Percentage of Total Enrollment

Community	2000-01	2001-02	2002-03	2003-04	2004-05
Cranston	19.5%	19.6%	20.2%	20.4%	21.2%
East Providence	18.7%	20.8%	21.4%	21.8%	23.9%
North Providence	20.8%	23.1%	20.3%	19.3%	18.5%
Pawtucket	20.1%	21.4%	22.4%	22.1%	19.4%
Warwick	**19.2%**	**20.1%**	**21.9%**	**18.8%**	**20.7%**
State Average	**19.3%**	**20.0%**	**20.5%**	**20.2%**	**20.1%**

Source: RI Dept. of Education and RIPEC calculations.

Eligibility for Free and Reduced Lunch

This measure indicates the percent of students who were eligible for the free and reduced lunch program. Students whose family incomes fall below certain income (poverty or near-poverty) guidelines are eligible for subsidized lunches. Enrollment in these programs is a proxy for poverty levels in the communities. Statewide, the number of children eligible for free and reduced lunch programs is projected to increase from 52,223 in FY 2001 to 53,025 in FY 2005, an increase of 802 children or 1.5 percent. Statewide, eligibility as a percentage of total enrollments increased from 33.4 percent in FY 2001 to 34.5 percent in FY 2005.

In Warwick eligibility for the program increased from 2,096 children in FY 2001 to 2,462 in FY 2005. The percentage of total enrollment eligible for the subsidized lunch programs increased from 17.1 percent in FY 2001 to 20.7 percent in FY 2005. This represents over a 3.5 percentage point gain during that time period. This increase is a function of an overall declining enrollment in the City and a relative high growth rate in eligibility for these programs.

When compared to its peers, Warwick experienced the second highest percentage increase (after North Providence), increasing the number of eligible students by 17.5 percent (366 children) between FY 2001 and FY 2005. During this time period, the state average increased by 1.5 percent or 802 students.

Free/Reduced Lunch Eligibility

Community	2000-01	2001-02	2002-03	2003-04	2004-05	2001-2005 Change Amount	2001-2005 Change Percent
Cranston	2,295	2,152	2,356	2,408	2,528	233	10.2%
East Providence	1,977	1,888	2,130	2,013	1,975	(2)	-0.1%
North Providence	703	737	633	809	828	125	17.8%
Pawtucket	6,622	6,201	6,153	6,215	6,245	(377)	-5.7%
Warwick	**2,096**	**2,158**	**2,301**	**2,325**	**2,462**	**366**	**17.5%**
State Total	**52,223**	**52,425**	**53,283**	**55,479**	**53,025**	**802**	**1.5%**

Source: RI Dept. of Education and RIPEC calculations.

There are a number of observations that can be derived from the student poverty data discussed above. First, one should note that there is a wide discrepancy among the surveyed districts. Eligibility for these programs as a percentage of total enrollment ranged from a high of 65.9 percent in Pawtucket to a low of 20.7 percent in Warwick. Warwick's eligibility for these programs as a percentage of total enrollments is also well below the statewide average of 34.5 percent in FY 2005. Seventy percent of pupils statewide eligible for these programs come from urban core districts alone. However, while Warwick has a lower concentration of children from families with economic needs than its peer districts and the State, Warwick's growth rate of 17.5 percent between FY 2001 and FY 2005 was above the Statewide average of 1.5 percent.

Free/Reduced Lunch as a Percentage of Total Enrollment

Community	2000-01	2001-02	2002-03	2003-04	2004-05
Cranston	20.8%	19.3%	20.9%	21.5%	22.8%
East Providence	29.9%	28.8%	33.1%	31.5%	32.7%
North Providence	19.8%	21.2%	18.4%	23.3%	23.4%
Pawtucket	65.8%	63.1%	62.2%	64.4%	65.9%
Warwick	**17.1%**	**17.7%**	**19.0%**	**19.4%**	**20.7%**
State Average	**33.4%**	**33.5%**	**33.9%**	**35.3%**	**34.5%**

Source: RI Dept. of Education and RIPEC calculations.

Second, while Warwick's enrollment is declining overall, a higher percentage of its students are eligible for these programs. This is a trend also seen in East Providence and North Providence. Pawtucket and Cranston experienced different trends. Pawtucket's overall enrollment as well as the number of students eligible for subsidized lunches declined between FY 2001 and FY 2005. On the other hand, Cranston's total school enrollment and the number of students eligible for subsidized lunches increased during that time.

Limited English Proficiency

FY 2005 enrollment data for limited English proficiency programs were not available for all districts. Therefore, RIPEC calculated the FY 2005 enrollment for Cranston and East Providence, using a 5-year rolling average. Statewide, an estimated 5.8 percent of the children were enrolled in limited English proficiency program in FY 2005. The number has declined from 10,119 in FY 2001 to an estimated 8,880 in FY 2005, a decline of 1,239 students or 12.2 percent during that time period.

Limited English Proficiency Enrollment for Public Schools

Community	2000-01	2001-02	2002-03	2003-04	*2004-05**	2001-2005 Change Amount	Percent
Cranston	448	475	430	434	*433*	(15)	-3.3%
East Providence	429	346	301	264	*209*	(220)	-51.2%
North Providence	115	115	79	57	53	(62)	-53.9%
Pawtucket	1,167	1,197	1,118	1,054	1,036	(131)	-11.2%
Warwick	**93**	**78**	**91**	**89**	**92**	**(1)**	**-1.1%**
State Total	**10,119**	**10,782**	**9,558**	**8,794**	**8,880**	**(1,239)**	**-12.2%**

*RIPEC calculations for Cranston and East Providence

Source: RI Dept. of Education and RIPEC calculations.

Warwick's estimated percentage of students enrolled in limited English proficiency programs as a percentage of total enrollment was at 0.8 percent in FY 2005, the same level than in FY 2001. Warwick had 92 students enrolled in these programs in FY 2005.

Warwick's enrollment in these programs is much lower than the four surveyed districts as well as the State average. Warwick had the lowest percentage of students enrolled in limited English proficiency programs as a percentage of total enrollments, when compared to the other four districts. The percentage ranged from an estimated low of 0.8 percent of total enrollment in Warwick to an estimated high of 10.9 percent in Pawtucket in FY 2005. Pawtucket was also the only school district among the surveyed districts whose percentage was above the statewide average of 5.8 percent in FY 2005.

All peer districts experienced a declining enrollment in LEP programs between FY 2001 and FY 2005. East Providence is estimated to experience the highest percentage decline, estimated to decline by 51.2 percent, from 429 in FY 2001 to 209 in FY 2005.

Limited English Proficiency as a Percentage of Total Enrollment

Community	2000-01	2001-02	2002-03	2003-04	*2004-05**
Cranston	4.1%	4.3%	3.8%	3.9%	*3.9%*
East Providence	6.5%	5.3%	4.7%	4.1%	*3.5%*
North Providence	3.2%	3.3%	2.3%	1.6%	*1.5%*
Pawtucket	11.6%	12.2%	11.3%	10.9%	*10.9%*
Warwick	**0.8%**	**0.6%**	**0.8%**	**0.7%**	***0.8%***
State Average	**6.5%**	**6.9%**	**6.1%**	**5.6%**	***5.8%***

*RIPEC calculations

Source: RI Dept. of Education and RIPEC calculations.

2. School District Expenditure Trends

School District Expenditure Summary

- Warwick's expenditures in FY 2005 were $147.3 million – increasing on average annually by 4.6 percent ($24.4 million) during that time period;
- On a per pupil basis, Warwick had the highest per pupil expenditures in FY 2005 when compared to its peer districts. Warwick's total expenditures per pupil increased on average annually by 5.4 percent, from $10,023 per pupil in FY 2001 to $12,383 per pupil in FY 2005.

Expenditures by Function

- As a percent of total expenditures Warwick's expenditures for operations were the highest among the surveyed school districts, taking up 16.6 percent of total expenditures in FY 2005. These expenditures amounted to $24.5 million in FY 2005. North Providence's expenditures for operations were the lowest, accounting for 12.1 percent of total expenditures, followed by Pawtucket with 12.2 percent;
- On average, the peer districts increased operation expenditures annually by 3.1 percent between FY 2001 and FY 2005. This compares to an average annual increase for the State of 4.2 percent during that time. Warwick experienced an average annual increase of 3.2 percent between FY 2001 and FY 2005;
- Among the peer districts there were different factors driving operation expenditures. In Warwick, North Providence and Pawtucket (excluding food service expenses), the majority of the growth came from increased expenditures to upkeep facilities, while transportation costs took up the majority of the expenditure growth in Cranston and East Providence; and
- When looking at per pupil expenditures by function, Warwick had the highest per pupil expenditures for instruction and operations in FY 2005, when compared to its peers.

Expenditures by Program

- In all surveyed districts (except North Providence), general education expenditures as a percent of total expenditures declined between FY 2001 and FY 2005. On the other hand, special education expenditures as a percent of total expenditures increased in all surveyed districts (except North Providence);
- In Warwick, general education expenditures increased by 16.4 percent ($15.3 million) between FY 2001 and FY 2005 to $108.5 million in FY 2005, while overall enrollment declined by 3.0 percent (373 students) during the same time;
- In Warwick, special education expenditures increased by 32.0 percent ($8.2 million) between FY 2001 and FY 2005. During the same time period, special education enrollment increased by 4.8 percent (113 students); and
- Among the peers, in FY 2005 special education expenditures as a percent of total expenditures ranged from a low of 21.6 percent in Cranston to a high of 27.0 percent in Pawtucket.

The following analyzes school district expenditures, based on the Rhode Island Department of Education's In$ite Data. The analysis looks at expenditure changes between FY 2001 and FY 2005, showing total expenditures as well as per pupil expenditures. Per pupil expenditures are based on fall enrollment of each year. It will also show expenditures by function (instruction, instructional support, operations, other commitments, and leadership) and expenditures by program (general education, special education, English as a second language, Title I, vocational education, and other programs) between FY 2001 and FY 2005.

Total FY 2001 – FY 2005 School District Expenditures

The following table shows total expenditures for FY 2001 and FY 2005. Total school district expenditures in FY 2005 ranged from $147.3 million in Warwick to $40.6 million in North Providence. This is in part a function of Warwick being the largest district among the peer districts. Within the State, Warwick is the second largest district after Providence, based on fall enrollment. Among its peer districts Warwick had the second highest percent increase in expenditures between FY 2001 and FY 2005. Expenditures increased on average annually by 4.6 percent or $24.4 million during that time period. Only Cranston experienced a higher percentage growth among the peer districts.

School District Expenditures
(Millions)

Community	FY 2001 Amount	FY 2005 Amount	Change 2001-05 Amount	Change 2001-05 Avg Ann
Cranston	$96.6	$123.8	$27.2	6.4%
East Providence (1)	63.5	68.1	4.6	1.8%
North Providence	34.2	40.6	6.4	4.4%
Pawtucket	87.0	103.9	16.9	4.5%
Warwick	122.9	147.3	24.4	4.6%
Peer Total	$404.2	$483.7	79.5	4.6%
State Total	$1,471.2	$1,824.1	352.9	5.5%

(1) Figures are preliminary given different fiscal year

Source: RIDE In$ite and RIPEC calculations.

The peer districts combined increased expenditures from $404.2 million in FY 2001 to $483.7 million in FY 2005, increasing by $79.5 million or on average by 4.6 percent. In FY 2005, the peer districts combined accounted for 26.5 percent of the State expenditures of $1,824.1 million. The State as a whole experienced an average annual increase of 5.5 percent between FY 2001 and FY 2005, almost 1.0 percentage point higher than the peer average. Only Cranston's average annual increase of 6.4 percent was higher than the State average and the peer average. Warwick's average annual increase of 4.6 percent was the same than the peer average. It should be noted that Warwick's enrollment is 7.1percent higher than Cranston, yet Warwick's overall education spending is 19.0 percent higher than Cranston's spending.

While total expenditures give one a sense of the size of the district's budget, it is more telling when looking at per pupil expenditures.

Expenditures Per Pupil

In Warwick, total expenditures per pupil increased by $2,360 per pupil or on average annually by 5.4 percent, from $10,023 in FY 2001 to $12,383 in FY 2005. When compared to its peer districts, Warwick had the highest per pupil expenditures in FY 2005, as well as in FY 2001. The lowest per pupil expenditures were in Pawtucket with $10,969 spent on each pupil in FY 2005.

Community	FY 2001	FY 2005	Change 2001-05 Amount	Change 2001-05 Avg Ann
Cranston	$8,748	$11,155	$2,407	6.3%
East Providence	9,621	11,267	1,646	4.0%
North Providence	9,646	11,500	1,854	4.5%
Pawtucket	8,641	10,969	2,328	6.1%
Warwick	10,023	12,383	2,360	5.4%
Peer Average	$9,336	$11,455	$2,119	5.2%
State Average	9,414	11,876	2,462	6.0%

Source: RIDE In$ite and RIPEC calculations.

The peer districts increased their expenditures per pupil on average by 5.2 percent, from $9,336 per pupil in FY 2001 to $11,455 per pupil in FY 2005. While Warwick had the highest per pupil expenditures, Cranston experienced the highest increase during these years. The Cranston school district increased expenditures from $8,748 per pupil in FY 2001 to $11,155 per pupil in FY 2005, an average annual increase of 6.3 percent. Cranston, Pawtucket and Warwick were above the peer average increase.

Per pupil expenditures statewide increased from $9,414 per pupil in FY 2001 to $11,876 per pupil in FY 2005. In FY 2001, of the peer communities East Providence, North Providence and Warwick were above the average statewide per pupil expenditures. While Warwick's average annual spending between FY 2001 and FY 2005 was below the statewide average of 6.0 percent, it was the only district among the peers that had a higher per pupil spending in FY 2005 than the statewide average.

It is important to understand what factors are driving the school budget's expenditures. Therefore, the following analysis looks at increases in individual functions or programs within the budget from FY 2001 to FY 2005.

FY 2001 to FY 2005 Expenditures by Function

Expenditures by function based on In$ite data are organized around five broad functional areas:

- Instruction - Includes mainly salaries and related employment costs for teachers, substitutes, and instructional paraprofessionals, as well as costs associated with classroom materials;
- Instructional support - Includes costs related to pupil support, teacher support, and program support;

- Operations - Includes non-instructional pupil services, such as transportation costs; food service; costs related to facilities (building, upkeep, utilities, and maintenance), business services (data processing and business operations);
- Other commitments - Includes debt service, capital projects, out-of-district obligations (dollars that are passed through the public school to parochial, private, charter and public schools, as well as contracted services of private schools for special education pupils); retiree benefits; and legal obligations; and
- Leadership - Includes costs for school management, district management, and the "superintendent's cabinet".

Total Expenditures by Function (as percent of total)

	Cranston		East Providence		North Providence		Pawtucket		Warwick	
	2001	2005	2001	2005	2001	2005	2001	2005	2001	2005
Instruction	57.8%	58.0%	58.5%	54.5%	62.5%	57.9%	58.5%	52.2%	60.2%	54.6%
Instr. Support										
Pupil Support	6.1%	5.7%	6.3%	6.0%	5.2%	6.2%	5.6%	5.4%	5.9%	5.8%
Teacher Support	2.4%	2.0%	0.8%	0.6%	0.6%	0.5%	1.4%	1.8%	0.8%	0.9%
Program Support	4.1%	6.1%	2.8%	10.0%	5.2%	7.9%	8.5%	13.1%	3.6%	8.7%
Subtotal Instr. Support	12.6%	13.9%	9.9%	16.6%	11.0%	14.5%	15.5%	20.3%	10.2%	15.4%
Operations										
Non-Instr. Pupil Services	7.0%	6.3%	6.6%	7.0%	4.1%	3.7%	5.4%	5.4%	6.1%	5.7%
Facilities	8.5%	7.7%	9.1%	7.9%	6.4%	7.4%	6.3%	5.8%	9.2%	8.8%
Business Services	2.0%	1.7%	1.4%	1.2%	1.2%	1.0%	0.8%	1.1%	2.4%	2.2%
Subtotal Operations	*17.5%*	*15.7%*	*17.1%*	*16.2%*	*11.6%*	*12.1%*	*12.5%*	*12.2%*	*17.6%*	*16.6%*
Other Commitments	5.5%	6.6%	8.8%	7.3%	7.8%	8.4%	9.0%	11.0%	5.0%	7.9%
Leadership	6.6%	5.8%	5.7%	5.4%	7.0%	7.1%	4.5%	4.3%	6.8%	5.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: RI Dept. of Education In$ite and RIPEC calculations.

Expenditures for instruction took up the largest portion of the school budgets. In FY 2005, these expenditures ranged from a high of 58.0 percent in Cranston to a low of 52.2 percent in Pawtucket. Expenditures for instructional support ranged from a high of 20.3 percent in Pawtucket to a low of 13.9 percent in Cranston. As a percent of total expenditures, Warwick's expenditures for operations were the highest among the peer districts, taking up 16.6 percent of total expenditures in FY 2005. North Providence's expenditures for operations were the lowest, accounting for 12.1 percent of total expenditures. Leadership expenditures ranged from a high of 7.1 percent of total expenditures in North Providence to a low of 4.3 percent in Pawtucket.

Warwick's FY 2005 expenditures amounted to $147.3 million, up from $122.9 million in FY 2001. This translated into an average annual increase of 4.6 percent during that time. Of the $24.4 million increase, 41.0 percent were attributable to additional spending for instructional support. Expenditures for other commitments accounted for 22.1 percent of the increase and instruction expenditures for 25.4 percent. Instruction expenditures alone accounted for 54.6 percent of total expenditures in FY 2005, down from 60.2 percent of total expenditures in FY 2001. These expenditures amounted to $80.3 million in FY 2005, an average annual increase of 2.0 percent over FY 2001 ($74.1 million).

Total Expenditures by Function ($ million)

	Cranston				East Providence				North Providence				Pawtucket				Warwick			
			2001-2005				2001-2005				2001-2005				2001-2005				2001-2005	
	2001	2005	Amt	Ave A	2001*	2005	Amt	Ave A	2001	2005	Amt	Ave A	2001	2005	Amt	Ave A	2001	2005	Amt	Ave A
Instruction	$55.9	$71.8	$15.9	6.5%	$37.2	$37.1	($0.1)	-0.1%	$21.5	$23.5	$2.0	2.2%	$50.9	$54.2	$3.3	1.6%	$74.1	$80.3	$6.2	2.0%
Instr. Support																				
Pupil Support	$5.9	$7.1	$1.2	4.7%	$4.0	$4.1	$0.1	0.6%	$1.8	$2.5	$0.7	8.6%	$4.9	$5.6	$0.7	3.4%	$7.2	$8.5	$1.3	4.2%
Teacher Support	2.3	2.5	0.2	2.1%	0.5	0.4	($0.1)	-5.4%	0.2	0.2	0.0	0.0%	1.2	1.9	0.7	12.2%	1.0	1.3	0.3	6.8%
Program Support	4.0	7.6	3.6	17.4%	1.8	6.8	$5.0	39.4%	1.8	3.2	1.4	15.5%	7.4	13.6	6.2	16.4%	4.4	12.8	8.4	30.6%
Subtotal Instr. Support	*$12.2*	*$17.2*	*$5.0*	*9.0%*	*$6.3*	*$11.3*	*$5.0*	*15.7%*	*$3.8*	*$5.9*	*$2.1*	*11.6%*	*$13.5*	*$21.1*	*$7.6*	*11.8%*	*$12.6*	*$22.6*	*$10.0*	*15.7%*
Operations																				
Non-Instr. Pupil Services	$6.8	$7.8	$1.0	3.5%	$4.2	$4.8	$0.6	3.4%	$1.4	$1.5	$0.1	1.7%	$4.7	$5.6	$0.9	4.5%	$7.4	$8.4	$1.0	3.2%
Facilities	8.2	9.5	1.3	3.7%	5.8	5.4	($0.4)	-1.8%	2.2	3.0	0.8	8.1%	5.5	6.0	0.5	2.2%	11.3	12.9	1.6	3.4%
Business Services	1.9	2.1	0.2	2.5%	0.9	0.8	($0.1)	-2.9%	0.4	0.4	0	0.0%	0.7	1.1	0.4	12.0%	2.9	3.2	0.3	2.5%
Subtotal Operations	*$16.9*	*$19.4*	*$2.5*	*3.5%*	*$10.9*	*$11.0*	*$0.1*	*0.2%*	*$4.0*	*$4.9*	*$0.9*	*5.2%*	*$10.9*	*$12.7*	*$1.8*	*3.9%*	*$21.6*	*$24.5*	*$2.9*	*3.2%*
Other Commitments	$5.3	$8.2	$2.9	11.5%	$5.6	$5.0	($0.6)	-2.8%	$2.7	$3.4	$0.7	5.9%	$7.8	$11.4	$3.6	10.0%	$6.2	$11.6	$5.4	17.0%
Leadership	$6.4	$7.2	$0.8	3.0%	$3.6	$3.7	$0.1	0.7%	$2.4	$2.9	$0.5	4.8%	$3.9	$4.5	$0.6	3.6%	$8.4	$8.2	($0.2)	-0.6%
Total	**$96.6**	**$123.8**	**$27.2**	**6.4%**	**$63.5**	**$68.1**	**$4.6**	**1.8%**	**$34.2**	**$40.6**	**$6.4**	**4.4%**	**$87.0**	**$103.9**	**$16.9**	**4.5%**	**$122.9**	**$147.3**	**$24.4**	**4.6%**
Total w/out other comm.	**$91.3**	**$115.6**	**$24.3**	**6.1%**	**$57.9**	**$63.1**	**$5.2**	**2.2%**	**$31.5**	**$37.2**	**$5.7**	**4.2%**	**$79.2**	**$92.5**	**$13.3**	**4.0%**	**$116.7**	**$135.7**	**$19.0**	**3.8%**

* East Providence's FY 2001 expenditures include debt service in the amount of $1.5 million.

Source: RI Dept. of Education and RIPEC calculations.

One of the major reasons that Warwick's instruction expenditures declined as a percent of total expenditures is based on a reclassification of expenditures in 2005. The Warwick School Department stated that in FY 2003-04, many of the teacher assistants were classified as Instructional Paraprofessionals (expenditures within Instruction). However, based on a reclassification of the Rhode Island Department of Education's In$ite Handbook, these expenditures were classified as Personal Attendants in 2005 (expenditures within Program Support). This is why one can see a decline in instruction expenditures as a percent of total expenditures and an increase in instructional support expenditures as a percent of total expenditures in 2005. The Warwick School Department stated that prior years could not be adjusted for that change since no data were available.

The second largest component in Warwick is expenditures for operations. In FY 2005, these expenditures accounted for $24.5 million or 16.6 percent of total expenditures. This represents an average annual increase of 3.2 percent ($2.9 million) over FY 2001 expenditures of $21.6 million (a more detailed discussion on operation expenditures is on pages 44 to 50).

Expenditures for instructional support were the third largest component, accounting for 15.4 percent of total expenditures in FY 2005, up from 10.2 percent of total expenditures in FY 2001. Instructional support expenditures amounted to $22.6 million in FY 2005, up from $12.6 million in FY 2001, an average annual increase of 15.7 percent.

Expenditures for other commitments as a percent of total expenditures increased from 5.0 percent in FY 2001 to 7.9 percent in FY 2005. These expenditures include debt service, capital projects, out-of-district obligations (dollars that are passed through the public school to parochial, private and charter schools, as well as contracted services of private schools for special education pupils); retiree benefits; and legal obligations. These expenditures increased on average annually by 17.0 percent or $5.4 million, from $6.2 million in FY 2001 to $11.6 million in FY 2005. Of the $5.4 million increase, 88.9 percent ($4.8 million) was expended for children attending parochial, private, and charter schools, as well as special education pupils attending private schools. Leadership expenditures declined on average annually by 0.6 percent ($0.2 million), from $8.4 million in FY 2001 to $8.2 million in FY 2005. As a percent of total expenditures, leadership expenditures accounted for 5.6 percent in FY 2005, down from 6.8 percent in FY 2005.

When compared to its peer districts, instruction expenditures as a percent of total expenditures were highest in Cranston, followed by North Providence, accounting for 58.0 percent, and 57.9 percent respectively, of total expenditures in FY 2005. The rate of growth in instruction expenditures was also highest in Cranston between FY 2001 and FY 2005, increasing on average annually by 6.5 percent or $15.9 million during that time period. Pawtucket experienced the lowest percentage increase, increasing its instruction expenditures on average annually by 1.6 percent, from $50.9 million in FY 2001 to $54.2 million in FY 2005. Warwick's instruction expenditures increased on average annually by 2.0 percent.

The increase in instructional support on a percentage basis was highest in East Providence and Warwick, increasing on average annually by 15.7 percent in both school districts between 2001 and 2005. East Providence's expenditures for instructional support increased from $6.3 million in FY 2001 to $11.3 million in FY 2005. Warwick's expenditures in this category increased from $12.6 million in FY 2001 to $22.6 million in FY 2005. As explained before, the Warwick School Department stated that it reclassified Instructional Paraprofessionals as Personal Attendants, thereby increasing instructional support expenditures. As said before, prior years could not be adjusted for that change. Cranston experienced the lowest percentage increase, increasing on average annually by 9.0 percent, from $12.2 million in FY 2001 to $17.2 million in FY 2005.

Expenditures for other commitments also varied widely among the peer communities. Between FY 2001 and 2005, Warwick saw the largest increase, both in absolute dollars and on a percentage basis. Warwick's expenditures for other commitments increased on by $5.4 million (average annual increase of 17.0 percent) between FY 2001 and FY 2005. Cranston experienced the second highest rate of growth, increasing its expenditures for other commitments on average annually by 11.5 percent ($2.9 million), from $5.3 million in FY 2001 to $8.2 million in FY 2005. East Providence was the only school district among the surveyed communities who experienced declining expenditures for other commitments, declining by $0.6 million (average annual decline of 2.8 percent), from $5.6 million in FY 2001 to $5.0 million in FY 2005.

Per Pupil Expenditures by Function

The table below shows per pupil expenditures by function. In Warwick, per pupil expenditures for instruction in FY 2005 amounted to $6,749, up from $6,042 per pupil in FY 2001, increasing on average annually by 2.8 percent. The second largest component of Warwick's school budget on a per pupil bases are expenditures for operations, accounting for $2,061 per pupil in FY 2005, increasing on average annually by 4.0 percent between FY 2001 and FY 2005. About half of the costs within operations are for the maintenance of facilities ($1,082 per pupil in FY 2005). Expenditures for instructional support amounted to $1,903 per pupil in FY 2005, an average annual increase of 16.6 percent over FY 2001 levels of $1,028, followed by $979 per pupil for other commitments and expenditures for leadership of $691 per pupil in FY 2005.

Total Per Pupil Expenditures by Function

	Cranston			East Providence			North Providence			Pawtucket			Warwick		
	2001	2005	2001-05 Avg Ann	2001	2005	2001-05 Avg Ann	2001	2005	2001-05 Avg Ann	2001	2005	2001-05 Avg Ann	2001	2005	2001-05 Avg Ann
Instruction	$5,059	$6,472	6.4%	$5,628	$6,134	2.2%	$6,051	$6,658	2.4%	$5,052	$5,718	3.1%	$6,042	$6,749	2.8%
Instr. Support	$1,101	$1,546	8.9%	$950	$1,872	18.5%	$1,057	$1,675	12.2%	$1,339	$2,227	13.6%	$1,028	$1,903	16.6%
Operations															
Non-Instr. Pupil Services	$612	$702	3.5%	$639	$796	5.7%	$387	$439	3.2%	$462	$593	6.5%	$609	$712	4.0%
Facilities	740	855	3.7%	878	900	0.6%	611	840	8.3%	548	631	3.6%	920	1,082	4.1%
Business Services	176	189	1.7%	140	123	-3.1%	118	104	-3.1%	72	120	13.6%	233	267	3.4%
Subtotal Operations	*$1,528*	*$1,746*	*3.4%*	*$1,657*	*$1,820*	*2.4%*	*$1,116*	*$1,383*	*5.5%*	*$1,082*	*$1,345*	*5.6%*	*$1,762*	*$2,061*	*4.0%*
Other Commitments	$478	$742	11.6%	$846	$833	-0.4%	$756	$969	6.4%	$779	$1,204	11.5%	$508	$979	17.8%
Leadership	$582	$649	2.8%	$540	$610	3.1%	$666	$815	5.2%	$389	$476	5.2%	$683	$691	0.3%
Total	**$8,748**	**$11,155**	**6.3%**	**$9,621**	**$11,267**	**4.0%**	**$9,646**	**$11,500**	**4.5%**	**$8,641**	**$10,969**	**6.1%**	**$10,023**	**$12,383**	**5.4%**
Total w/out other comm.	**$8,270**	**$10,413**	**5.9%**	**$8,775**	**$10,434**	**4.4%**	**$8,890**	**$10,531**	**4.3%**	**$7,862**	**$9,765**	**5.6%**	**$9,515**	**$11,403**	**4.6%**

Source: RI Dept. of Education and RIPEC calculations.

When compared to its peers, Warwick had the highest per pupil expenditures for instruction in FY 2005. The lowest amount spent on instruction among the peers was Pawtucket. This district spent $5,052 per pupil on instruction in FY 2005. Warwick's peer districts increased their average annual per pupil instruction expenditures from a low of 2.2 percent (East Providence) to a high of 6.4 percent (Cranston).

However, on a per pupil basis, Pawtucket spent the most on instructional support in FY 2005, amounting to $2,227 per pupil. Expenditures increased on average annually by 13.6 percent, from $1,339 in FY 2001. Cranston spent the lowest amount on instructional support among the peer districts, increasing its expenditures from $1,101 per pupil in FY 2001 to $1,546 in FY 2005. Warwick ranked second highest in spending per pupil for instructional support among the surveyed districts, with $1,903 per pupil.

Warwick's $2,061 expenditure per pupil for operations was the highest in FY 2005. Expenditures increased on average annually by 4.0 percent, from $1,762 per pupil in FY 2001. More than half of operation expenditures go to the maintenance of facilities ($1,082 per pupil) in Warwick. Pawtucket spent the lowest amount on operations of the

peer districts, increasing its expenditures from $1,082 per pupil in FY 2001 to $1,345 per pupil in FY 2005. The lowest percentage increase was in East Providence. East Providence's expenditures for operations increased on average annually by 2.4 percent, from $1,657 per pupil in FY 2001 to $1,820 per pupil in FY 2005.

Pawtucket had the highest per pupil expenditures for other commitments in FY 2005, increasing it by 54.5 percent to $1,204 per pupil in FY 2005. Most of the expenditures for this category are expenditures that are passed through the school district to parochial, private, and charter schools. It also includes contracted services of private schools for special education pupils. Among the surveyed communities, expenditures for other commitments increased on average annually from a high of 17.8 percent (Warwick) to a decline of 0.4 percent in East Providence between FY 2001 and FY 2005. Cranston spent the lowest amount on other commitments among the peer districts. This district spent $742 per pupil in FY 2005.

Expenditures for leadership were highest in North Providence in FY 2005. This district spent $815 per pupil in FY 2005. The lowest amount was spent in Pawtucket, amounting to $476 per pupil in FY 2005. Warwick's leadership expenses ranked the district second highest among the surveyed districts, accounting for $691 per pupil in FY 2005.

Operation Expenditures

Warwick's operation expenditures increased from $21.6 million in FY 2001 to $24.5 million in FY 2005. In FY 2001, expenditures for operations accounted for 17.6 percent of total expenditures. This has declined to 16.6 percent in FY 2005.

Within operations expenditures, facilities accounted for about half of the expenditures in FY 2005. Expenditures increased on average annually by 3.4 percent, from $11.3 million in FY 2001 to $12.9 million in FY 2005. While expenditures for facilities as a percent of total expenditures declined from 9.2 percent in FY 2001 to 8.7 percent in FY 2005, it still accounted for the greatest share of growth in operation expenditures. The $1.6 million increase in facilities expenditures accounted for 6.5 percent of the total expenditure growth.

The second largest component within operations is expenditures for business operations. Business operations expenditures increased by $1.0 million, from $1.9 million in FY 2001 to $2.9 million in FY 2005. This translates into an average annual growth rate of 11.3 percent. Expenditures for business operations include the cost of business offices (e.g. payroll, human resources, accounting and finance, procurement). It also includes salaries and related employment costs, office expenses and all other departmental costs.

2001 - 2005 Operation Expenditures ($ million)

	2001		2005		2001-05 Change			Per Pupil		2001-05 Change		
	Amount	% of Total	Amount	% of Total	Amount	Avg Ann	Share*	2001	2005	Amount	Avg Ann	Share*
Cranston												
Transportation	$3.7	3.8%	$5.4	4.3%	$1.6	9.6%	6.0%	$337	$483	$146	9.4%	6.2%
Food Service	2.1	2.2%	2.4	2.0%	0.3	3.8%	1.2%	190	219	30	3.7%	1.3%
Safety	0.9	1.0%	0.0	0.0%	(0.9)	-85.3%	-3.5%	86	0	(85)	-85.3%	-3.6%
Facilities	8.2	8.5%	9.5	7.7%	1.3	3.8%	4.8%	740	855	115	3.7%	4.9%
Data Processing	0.4	0.4%	0.1	0.1%	(0.3)	-25.2%	-1.1%	38	12	(26)	-25.3%	-1.1%
Business Operations	1.5	1.6%	2.0	1.6%	0.4	6.6%	1.6%	138	177	39	6.5%	1.7%
Subtotal Operations	*$16.9*	*17.5%*	*$19.4*	*15.6%*	*$2.5*	*3.5%*	*9.2%*	*$1,528*	*$1,746*	*$218*	*3.4%*	*9.2%*
Total Expenditures	**$96.6**	**100.0%**	**$123.8**	**100.0%**	**$27.2**	**6.4%**	**100.0%**	**$8,748.0**	**$11,155**	**$2,407**	**6.3%**	**102.0%**
East Providence												
Transportation	$2.6	4.1%	$3.1	4.5%	$0.5	4.6%	11.2%	$392	$512	$121	7.0%	5.1%
Food Service	1.5	2.4%	1.7	2.5%	0.2	3.2%	4.4%	229	284	54	5.5%	2.3%
Safety	0.1	0.2%	0.0	0.0%	(0.1)	-64.5%	-2.5%	17	0	(17)	-63.8%	-0.7%
Facilities	5.8	9.1%	5.4	8.0%	(0.4)	-1.6%	-7.9%	878	900	21	0.6%	0.9%
Data Processing	-	0.0%	-	0.0%	-	0.0%	0.0%	-	-	-	0.0%	0.0%
Business Operations	0.9	1.5%	0.7	1.1%	(0.2)	-5.3%	-3.9%	140	123	(17)	-3.1%	-0.7%
Subtotal Operations	*$10.9*	*17.2%*	*$11.0*	*16.2%*	*$0.1*	*0.1%*	*1.3%*	*$1,657*	*$1,819*	*$162*	*2.4%*	*6.9%*
Total	**$63.5**	**100.0%**	**$68.1**	**100.0%**	**$4.6**	**1.8%**	**100.0%**	**$9,621**	**$11,267**	**$1,646**	**4.0%**	**69.7%**
North Providence												
Transportation	$0.2	0.6%	$0.5	1.3%	$0.3	26.0%	5.0%	$59	$149	$90	26.1%	3.8%
Food Service	0.9	2.7%	0.9	2.3%	0.0	0.5%	0.3%	258	264	6	0.6%	0.3%
Safety	0.2	0.7%	0.1	0.2%	(0.2)	-22.6%	-2.5%	70	25	(45)	-22.5%	-1.9%
Facilities	2.2	6.3%	3.0	7.3%	0.8	8.2%	12.5%	611	840	230	8.3%	9.7%
Data Processing	0.1	0.3%	0.1	0.3%	0.0	3.6%	0.2%	28	33	4	3.7%	0.2%
Business Operations	0.3	0.9%	0.3	0.6%	(0.1)	-5.7%	-1.0%	90	72	(18)	-5.5%	-0.8%
Subtotal Operations	*$4.0*	*11.6%*	*$4.9*	*12.0%*	*$0.9*	*5.4%*	*14.5%*	*$1,116*	*$1,383*	*$267*	*5.5%*	*11.3%*
Total	**$34.2**	**100.0%**	**$40.6**	**100.0%**	**$6.4**	**4.4%**	**100.0%**	**$9,646**	**$11,500**	**$1,853**	**4.5%**	**78.5%**
Pawtucket												
Transportation	$2.1	2.4%	$2.1	2.0%	$0.0	0.5%	0.2%	$206	$223	$17	2.0%	0.7%
Food Service	2.6	2.9%	3.4	3.3%	0.9	7.6%	5.2%	254	363	109	9.3%	4.6%
Safety	0.0	0.0%	0.1	0.1%	0.1	43.4%	0.3%	2	7	6	45.6%	0.2%
Facilities	5.5	6.3%	6.0	5.8%	0.5	2.0%	2.7%	548	631	83	3.6%	3.5%
Data Processing	0.2	0.2%	0.4	0.4%	0.3	28.9%	1.6%	15	45	29	30.8%	1.2%
Business Operations	0.6	0.7%	0.7	0.7%	0.1	5.8%	0.9%	57	75	19	7.5%	0.8%
Subtotal Operations	*$10.9*	*12.5%*	*$12.7*	*12.3%*	*$1.8*	*4.0%*	*10.9%*	*$1,082*	*$1,345*	*$263*	*5.6%*	*11.1%*
Total	**$87.0**	**100.0%**	**$103.9**	**100.0%**	**$16.9**	**4.5%**	**100.0%**	$8,641	$10,969	**$2,328**	**6.1%**	**98.6%**
Warwick												
Transportation	$4.5	3.6%	$4.8	3.3%	$0.4	1.9%	1.4%	$363	$404	$41	2.7%	1.7%
Food Service	2.6	2.1%	3.2	2.2%	0.6	5.3%	2.5%	213	270	57	6.2%	2.4%
Safety	0.4	0.3%	0.4	0.3%	0.0	2.2%	0.1%	33	37	4	2.9%	0.2%
Facilities	11.3	9.2%	12.9	8.7%	1.6	3.4%	6.5%	920	1,082	163	4.2%	6.9%
Data Processing	1.0	0.8%	0.3	0.2%	(0.7)	-27.4%	-2.9%	79	23	(56)	-26.8%	-2.4%
Business Operations	1.9	1.5%	2.9	2.0%	1.0	11.3%	4.2%	154	244	90	12.2%	3.8%
Subtotal Operations	*$21.6*	*17.6%*	*$24.5*	*16.6%*	*$2.9*	*3.2%*	*11.9%*	*$1,762*	*$2,061*	*$299*	*4.0%*	*12.7%*
Total	**$122.9**	**100.0%**	**$147.3**	**100.0%**	**$24.4**	**4.6%**	**100.0%**	**$10,023**	**$12,383**	**$2,360**	**5.4%**	**100.0%**

*Share = share of total expenditure growth.
Source: RI Dept. of Education In$ite and RIPEC calculations.

In FY 2005, transportation expenditures in Warwick accounted for $4.8 million in expenditures, up from $4.5 million in FY 2001. This translates into an average annual increase of 1.9 percent during that time period. In FY 2005, transportation accounted for 3.3 percent of total expenditures, down from 3.6 percent in FY 2001.These expenses include all costs of transportation services associated with district students attending district schools, e.g. bus driver salaries and related employment costs, or transportation contracts, and administrators who administer the transportation services. It also includes the maintenance and operating costs associated with bus operations.

Expenditures for food services accounted for 2.2 percent of total expenditures in FY 2005. In FY 2005 food service expenditures amounted to $3.2 million, increasing by $0.6 million from FY 2001. However, one should note that Warwick received a total of $2.6

million in revenues for food services in FY 2005, of which $0.9 million were from the federal government and $1.7 from sales.

Data processing expenditures declined by $0.7 million, from $1.0 million in FY 2001 to $0.3 million in FY 2005. Expenditures include the cost of the data processing department, including salaries and related employment costs, equipment costs and maintenance contracts. It does not include student use technology which is budgeted under pupil-use technology and software within instruction expenditures. The Warwick School Department stated that expenditures that were reported under data processing until 2004 were more appropriately categorized as pupil-use technology and software in 2005. Assuming that in FY 2001 data processing would account for the same percentage of total expenditures then expenditures for data processing would have been $241,033 in FY 2001 (0.2 percent of total expenditures).

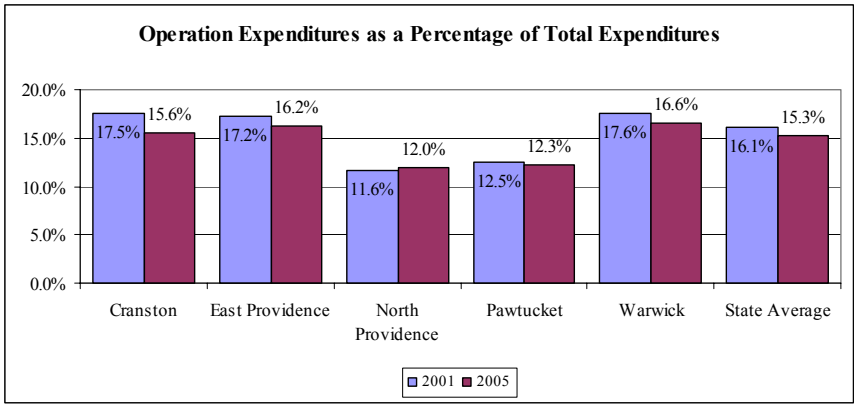
Warwick's peer communities' operation expenditures in FY 2005 ranged from $4.9 million in North Providence to $19.4 million in Cranston. As a percent of total expenditures, operation expenditures in Warwick were the highest among the peers with 16.6 percent of total expenditures, while North Providence had the lowest percentage with 12.0 percent of total expenditures attributable to operation expenditures. On average, the State spent 15.3 percent of its expenditures on operation expenditures. Of the surveyed districts, North Providence and Pawtucket were spending a smaller amount than the State average.

2005 Operation Expenditures (millions)

	Cranston		East Prov.		North Prov.		Pawtucket		Warwick	
	Amount	2001-05 Avg Ann	Amount	2001-05 Avg Ann	Amount	2001-05 Avg Ann	Amount	2001-05 Avg Ann	Amount	2001-05 Avg Ann
Transportation	$5.4	9.6%	$3.1	4.6%	$0.5	26.0%	$2.1	0.5%	$4.8	1.9%
Food Service	2.4	3.8%	1.7	3.2%	0.9	0.5%	3.4	7.6%	3.2	5.3%
Safety	0.0	-85.3%	0.0	-64.5%	0.0	-22.6%	0.0	43.4%	0.4	2.2%
Facilities	9.5	3.8%	5.4	-1.6%	3.0	8.2%	6.0	2.0%	12.9	3.4%
Data Processing	0.1	-25.2%	0.0	0.0%	0.1	3.6%	0.4	28.9%	0.3	-27.4%
Business Operations	2.0	6.6%	0.7	-5.3%	0.3	-5.7%	0.7	5.8%	2.9	11.3%
Subtotal Operations	*$19.4*	*3.5%*	*$10.9*	*0.1%*	*$4.8*	*5.4%*	*$12.6*	*4.0%*	*$24.5*	*3.2%*
Peer Group Average	**$14.5**	**3.1%**								
State Total/Average	**$279.2**	**4.2%**								

The highest growth rate was in North Providence, increasing operation expenditures on average by 5.4 percent between FY 2001 and FY 2005, from $4.0 million in FY 2001 to $4.9 million in FY 2005. The lowest percentage increase was in East Providence, increasing on average annually by 0.1 percent, from $10.9 million in FY 2001 to $11.0 million in FY 2005. Warwick's average annual growth rate of 3.2 percent ranked the district second lowest among its peers. However, when adjusted for data processing expenditures in FY 2001, Warwick's growth rate would be 4.1 percent, ranking the district second highest in FY 2005.

On average, the peer districts increased operation expenditures annually by 3.1 percent between FY 2001 and FY 2005. This compares to an average annual increase for the State of 4.2 percent during that time. All surveyed districts experienced a lower annual growth rate when compared to the State as a whole. As stated before, based on a change in categorization, Warwick's data processing expenditures declined from $1.0 million in FY 2001 to $0.3 million in FY 2005. Assuming that data processing would account for the same percentage of total expenditures in FY 2001 than in FY 2005, Warwick's average annual growth rate would be 4.1 percent, instead of 3.2 percent. The East Providence school district does not have any data processing costs. Assuming data processing costs at 0.2 percent of total expenditures would change East Providence's average annual growth rate to 0.2 percent, instead of 0.1 percent.



Among the peer districts there were different factors driving the costs. In Warwick, North Providence and Pawtucket (not counting food service expenses), the majority of the growth within operations comes from increased expenditures to upkeep facilities. Facilities expenditures accounted for 12.5 percent of the growth in North Providence, 6.5 percent of total expenditure growth in Warwick, and for 2.7 percent in Pawtucket. While the Warwick school district has about 20.3 percent more square feet than Cranston, Warwick's expenditures for facilities were 35.6 percent higher than Cranston's expenditures.

Warwick had the highest per pupil expenditure for facilities, spending $1,082 per pupil in FY 2005. This outpaced all of the other peer school districts, with Warwick being 20.2 percent higher than the next highest school district (East Providence at $900 per pupil). Warwick has about 164 square feet per student, the lowest density among the peers. However, the district has the second highest expenditures (with East Providence) among the peers with $6.61 per square feet. North Providence ranked highest among the peers with $6.84 per square feet. The district also has one of the lowest ratios of square feet per student (123 square feet per student) among the surveyed districts. The peer group average is $6.20 per square feet in 2005, putting Warwick 6.6 percent above the peer group average and North Providence 10.3 percent. The lowest expenditures were in Pawtucket, amounting to $5.42 per square feet.

2005 Overview of Facilities

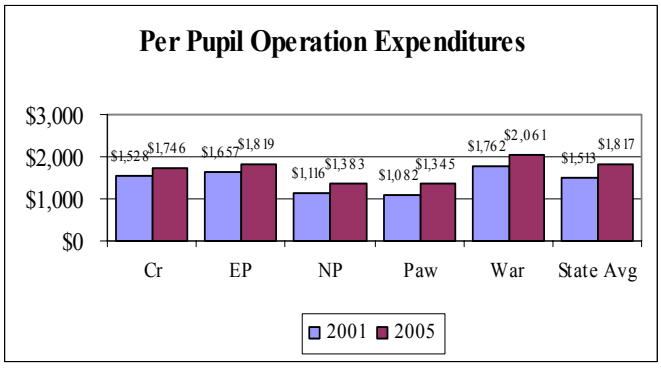
	Cranston	East Providence	North P.	Pawtucket	Warwick
Number of Schools	24	12	9	15	26
Years Built	1919-2002	1952-2003	1915-1965	1915-1977	1910-1972
Square Feet	1,620,025	823,483	434,280	1,103,827	1,948,627
Enrollment	11,099	6,048	3,533	9,476	11,892
Facilities Exp.	$9,490,422	$5,440,872	$2,968,692	$5,980,777	$12,871,178
Exp/Sqfeet	$5.86	$6.61	$6.84	$5.42	$6.61
Exp/Pupil	$855	$900	$840	$631	$1,082
Sqfeet/Student	146	136	123	116	164

Source: RIPEC calculations based on self-reported data from the various school districts, except facilities expenditures are from RIDE In$ite and enrollment is based on data provided by RIDE

While in Warwick, North Providence and Pawtucket expenditures for facilities took up the majority of costs, it was transportation costs in Cranston and East Providence. In East Providence, 11.2 percent of the total cost increase between FY 2001 and FY 2005 is attributable to transportation expenditures. In Cranston, these expenditures accounted for 6.0 percent of the total growth. In comparison, in Warwick it accounted for 1.5 percent of the growth, in Pawtucket for 0.2 percent, and 5.0 percent in North Providence. Transportation costs in Cranston accounted for 3.8 percent of total expenditures in 2001, increasing to 4.3 percent of total expenditures in 2005. In East Providence, these costs accounted for 4.5 percent of total expenditures in 2005, up from 4.1 percent in 2001.

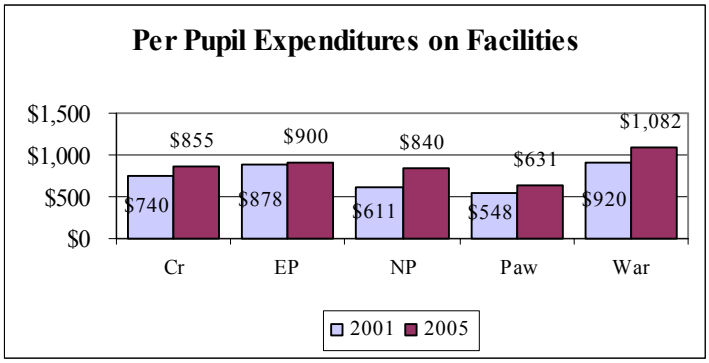
In Warwick, another growth factor was expenditures related to business operations, accounting for 4.2 percent of the total growth rate. This was the highest share among the peers. Among the peers the share of expenditures for business operations ranged from a decline of 3.9 percent in East Providence to 1.6 percent in Cranston. Expenditures for business operations as a percent of total expenditures ranged from a high of 2.0 percent in Warwick to a low of 0.6 percent in North Providence in 2005.

Operation expenditures per pupil



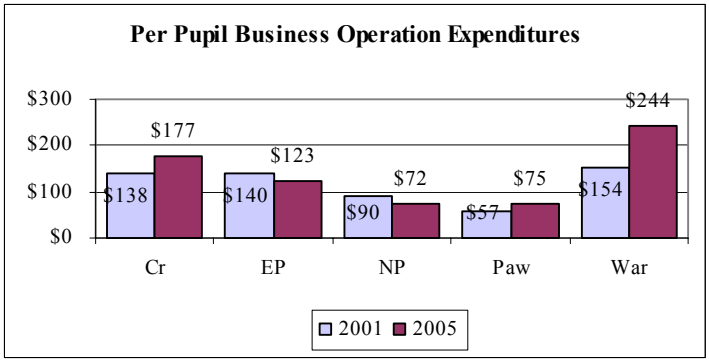
On a per pupil basis, Warwick's FY 2005 operation expenditures amounted to $2,061, an average annual increase of 4.0 percent from the FY 2001 level of $1,762. When compared to its peers, operation expenditures in FY 2005 ranged from a high of $2,061 per pupil in Warwick to a low of $1,345 per pupil in Pawtucket. Warwick's per pupil operation expenditures in FY 2005 were 18.0 percent above the peer group median of $1,746 per pupil. Among the surveyed districts, East Providence's ($1,819 per pupil) and Warwick's ($2,061 per pupil) per pupil expenditures for operations were above the State average of $1,817 per pupil.

More than half of per pupil expenditures within operations are spend on expenditures for facilities, accounting for $1,082 per pupil. Per pupil expenditures for facilities in FY 2005 ranged from a low of $631 per pupil in Pawtucket to a high of $1,082 in Warwick.



Per pupil transportation expenditures ranged from a low of $59 per pupil in North Providence to a high of $512 per pupil In East Providence. Business operation expenditures ranged from a low of $57 per pupil in Pawtucket to a high of $244 in Warwick.

Per pupil expenditures on business operations ranged from a low of $72 in North Providence to a high of $244 in Warwick. Warwick's per pupil business operation expenditures in FY 2005 were 76.6 percent higher than the peer average of $138 per pupil. Warwick's spending was also 37.9 percent higher than Cranston's per pupil expenditures of $177 which were the second highest among the peers.



FY 2001 to FY 2005 Expenditures by Program

Expenditures by program based on In$ite data are organized around six areas: Special education; bilingual, ESL or LEP; Chapter 1 or Title 1; vocational education; other programs; and general education. These programs indicate which group of students benefited from the expenditures.

- General education - Includes costs associated with the standard or regular programs, drawn from the General Fund, from both State and local sources (property taxes), and are thus not categorical or reimbursable.
- Special education - Includes all additional costs for children with special needs (full-time and part-time special education);
- Bilingual, ESL, or LEP - Includes costs related to federal and state programs for children with limited English proficiency, but does not include costs of "foreign language training";
- Chapter 1 or Title 1 - Includes the costs of all programs targeted toward children at risk of academic failure, typically due to the impact of poverty. Includes federal dollars (distributed by the State) for assisting low-income students under the federal law Improving America's Schools Act;

- Vocational education - Includes those vocational training costs that are directly associated with integrated education programs to teach trades or specific job-related skills; also involved pre-vocational experiences and explorations, planning related to employment after school graduation, or planning related to attending trade schools, community colleges, or a four-year university, with the intent of mastering a particular trade or employment skill; and
- Other programs - Includes programs that are outside the bounds of the typical school day, school year, or regular curriculum. Child care, recreational programs, military programs, and summer school are all examples of "other" programs.

When looking at expenditures by program, general education and special education expenditures account for the bulk of expenditures. Together, in FY 2005 these two programs accounted for a high of 98.5 percent of all expenditures in Warwick to a low of 91.0 percent in Pawtucket. Expenditures for general education in FY 2005 alone ranged from a high of 75.1 percent of total expenditures in Warwick to a low of 64.0 percent in Pawtucket.

In FY 2005, special education expenditures as a percent of total expenditures ranged from a high of 27.0 percent of all expenditures in Pawtucket to a low of 21.6 percent in Cranston among the surveyed communities. Warwick's special education expenditures accounted for 23.4 percent of all expenditures. Expenditures for English as a second language, Title 1 and other programs accounted for the balance. One should note that expenditures for vocational education have been taken out when comparing program expenditures as a percent of total expenditures since North Providence and Pawtucket do not have vocational education expenditures.

Total Expenditures by Program (as a percent of total expenditures)*

	Cranston		East Providence		North Providence		Pawtucket		Warwick	
	2001	2005	2001	2005	2001	2005	2001	2005	2001	2005
Special Education	18.4%	21.6%	20.5%	26.3%	26.8%	25.2%	26.6%	27.0%	21.2%	23.4%
ESL	1.4%	1.4%	2.5%	1.6%	1.5%	1.1%	5.0%	4.4%	0.4%	0.4%
Title I	1.2%	1.2%	1.0%	1.3%	0.7%	1.1%	2.7%	4.3%	0.8%	0.9%
Other Programs	0.4%	0.7%	0.2%	0.2%	0.0%	0.0%	0.1%	0.3%	0.2%	0.2%
General Education	78.6%	75.1%	75.9%	70.6%	71.0%	72.6%	65.6%	64.0%	77.3%	75.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Expenditures do not include expenditures for vocational education.

Source: RIDE In$ite and RIPEC calculations.

It is interesting to note that general education expenditures as a percent of total expenditures declined in all surveyed communities except North Providence between FY 2001 and FY 2005. Warwick's general education expenditures as a percent of total expenditures declined from 77.3 percent in FY 2001 to 75.1 percent in FY 2005. During the same time period, special education expenditures as a percent of total expenditures increased in all surveyed school districts except North Providence. Warwick's special education expenditures increased from 21.2 percent of all expenditures in FY 2001 to 23.4 percent in FY 2005.

The following table shows expenditure increases by program in absolute numbers. One should note that total expenditures are shown with expenditures for vocational education and without, since not all surveyed school districts provide these programs.

Total Expenditures by Program ($ million)

	Cranston				East Providence				North Providence				Pawtucket				Warwick			
			01-05				01-05				01-05				01-05				01-05	
	2001	2005	Amt.	Ave A	2001	2005	Amt.	Ave A	2001	2005	Amt.	Ave A	2001	2005	Amt.	Ave A	2001	2005	Amt.	Ave A
Special Education	$17.2	$26.1	$8.9	10.9%	$12.7	$17.5	$4.8	8.3%	$9.2	$10.2	$1.1	2.8%	$23.1	$28.0	$4.9	4.9%	$25.6	$33.8	$8.2	7.2%
ESL	1.3	1.7	0.4	7.2%	1.5	1.0	(0.5)	-8.8%	0.5	0.5	(0.1)	-2.6%	4.3	4.6	0.2	1.4%	0.4	0.5	0.1	4.8%
Title I	1.1	1.4	0.4	7.5%	0.6	0.8	0.2	8.5%	0.3	0.4	0.2	14.8%	2.3	4.5	2.2	18.0%	1.0	1.3	0.3	7.0%
Vocational Ed	2.8	2.9	0.1	1.2%	1.7	1.8	0.0	0.6%	0.0	0.0	(0.0)	-8.9%	0.2	0.2	0.1	8.8%	2.4	2.8	0.4	3.5%
Other Programs	0.4	0.8	0.4	19.3%	0.1	0.1	0.0	5.9%	0.0	0.0	0.0	0.0%	0.1	0.3	0.2	31.5%	0.2	0.3	0.1	6.1%
General Education	73.8	90.8	17.0	5.3%	46.9	46.9	(0.0)	0.0%	24.3	29.5	5.2	5.0%	57.0	66.4	9.4	3.9%	93.2	108.6	15.3	3.9%
Total	$96.6	$123.8	$27.2	6.4%	$63.5	$68.1	$4.6	1.8%	$34.2	$40.6	$6.4	4.4%	$87.0	$103.9	$16.9	4.5%	$122.9	$147.3	$24.3	4.6%
Total w/out Voc Ed	$93.8	$120.9	$27.1	6.6%	$61.8	$66.4	$4.6	1.8%	$34.2	$40.6	$6.4	4.4%	$86.9	$103.7	$16.9	4.5%	$120.5	$144.5	$24.0	4.6%

Source: RIDE InSite and RIPEC calculations.

General education expenditures in Warwick increased from $93.2 million in FY 2001 to $108.6 million in FY 2005. Of the total increase of $24.3 million between FY 2001 and FY 2005, 63.1 percent were attributable to general education expenditures. Between FY 2001 and FY 2005, these expenditures increased by 16.5 percent ($15.3 million), while overall enrollment declined by 3.0 percent (373 pupils) during the same period.

Warwick's special education expenditures accounted for 33.5 percent of the increase between FY 2001 and FY 2005, increasing from $25.6 million in FY 2001 to $33.8 million in FY 2005. Warwick's special education expenditures increased by 31.9 percent ($8.2 million) between FY 2001 and FY 2005. During the same time period, special education enrollment increased by 4.8 percent (113 students). In other words, special education expenditures increased six times faster than enrollment in these programs.

In Warwick, 3.4 percent of the total expenditures in FY 2005 were attributable to expenditures for English as a second language programs, Title I programs, vocational education and other programs. Together, these programs amounted to $4.9 million in FY 2005.

When compared to its peers, the increase in general education expenditures on a percentage basis was highest in Cranston between FY 2001 and FY 2005, increasing by 23.1 percent ($17.0 million), from $73.8 million in FY 2001 to $90.8 million in FY 2005. During this time, Cranston's enrollment increased by 0.5 percent (59 students). East Providence's general education expenditures in FY 2005 were at the same level than in FY 2001 ($46.9 million).

On a percentage basis, special education expenditures increased the highest in Cranston among the surveyed school districts, increasing by 51.4 percent ($8.9 million), from $17.2 million in FY 2001 to $26.1 million in FY 2005. During this period, Cranston's

special education enrollment increased by 9.0 percent (194 students). North Providence experienced the lowest increase on a percentage basis, increasing by 11.9 percent ($1.1 million), from $9.2 million in FY 2001 to $10.2 million in FY 2005.

Title 1 expenditures increased from a high of 93.7 percent ($2.2 million) in Pawtucket to a low of 31.3 percent ($0.3 million) in Warwick. However, one should note that Title 1 expenditures only accounted between 0.9 percent (Warwick) and 4.3 percent (Pawtucket) of total expenditures in FY 2005.

While gross spending levels provide a picture of overall growth and trends, one needs to put expenditures on a per pupil basis to provide a comparable base for analysis.

Per Pupil Expenditures by Program

The table below shows per pupil expenditures by program. In FY 2005, Warwick's per pupil expenditures for special education amounted to $13,705, an average annual increase of 5.9 percent over the FY 2001 level of $10,893 per pupil. This growth rate is slightly higher than the overall average annual per pupil expenditure growth rate of 5.4 percent.

The second highest expenditure component on a per pupil basis in Warwick is expenditures for general education. Warwick's general education expenditures amounted to $9,129 per pupil in FY 2005, up from $7,601 per pupil in FY 2001. This is a 4.7 percent average annual increase over this period. Expenditures for English as a second language programs increased on average annually by 5.1 percent, from $4,694 per pupil in FY 2001 to $5,726 per pupil in FY 2005. One should note that Warwick only has 92 pupils enrolled in these programs, accounting for 0.8 percent of total enrollment in FY 2005. Per pupil expenditures for Title 1 programs were $541 per pupil in FY 2005, up from $484 per pupil in FY 2001. This is an average annual increase of 2.8 percent during that period. Eligibility for these programs increased on average annually by 4.1 percent during that period.

Total Per Pupil Expenditures by Program

	Cranston			East Providence			North Providence			Pawtucket			Warwick		
	2001	2005	2001-05 Ave A	2001	2005	2001-05 Ave A	2001	2005	2001-05 Ave A	2001	2005	2001-05 Ave A	2001	2005	2001-05 Ave A
Special Education	$7,989	$11,099	8.6%	$9,680	$12,086	5.7%	$12,409	$15,690	6.0%	$11,423	$15,239	7.5%	$10,893	$13,705	5.9%
ESL	2,944	4,026	8.1%	4,333	5,023	3.8%	4,396	8,594	18.2%	3,718	4,428	4.5%	4,694	5,726	5.1%
Title I	472	573	5.0%	340	423	5.6%	357	527	10.2%	348	714	19.7%	484	541	2.8%
General Education	6,681	8,181	5.2%	7,166	7,753	2.0%	6,844	8,341	5.1%	5,659	7,002	5.5%	7,601	9,129	4.7%
Total	**$8,748**	**$11,155**	**6.3%**	**$9,621**	**$11,267**	**4.0%**	**$9,646**	**$11,500**	**4.5%**	**$8,641**	**$10,969**	**6.1%**	**$10,023**	**$12,383**	**5.4%**
Total w/out voc ed	**$8,497**	**$10,894**	**6.4%**	**$9,517**	**$10,976**	**3.6%**	**$9,637**	**$11,494**	**4.5%**	**$8,626**	**$10,946**	**6.1%**	**$9,827**	**$12,151**	**5.5%**

Source: RI Dept. of Education and RIPEC calculations.

When compared to its peer districts, North Providence spent the most for special education on a per pupil basis. This district spent $15,690 per pupil in FY 2005, up from $12,409 per pupil in FY 2001, an average annual increase of 6.0 percent. Cranston had the lowest per pupil expenditures for special education. This district's expenditures amounted to $11,099 per pupil in FY 2005, up from $7,989 per pupil in FY 2001. On a per pupil basis, these expenditures increased on average annually from a high of 8.6 percent in Cranston to a low of 5.7 percent in East Providence between FY 2001 and FY 2005.

Warwick had the highest general education expenditures per pupil in FY 2005. The lowest amount spent on general education among the peer districts was in Pawtucket. This district spent $7,002 per pupil in FY 2005. Warwick's peer districts increased its general education expenditures on average annually between 2.0 percent (East Providence) and 5.5 percent (Pawtucket).

On a per pupil basis, North Providence spent the most for English as a second language programs in FY 2005, amounting to $8,594 per pupil. It also had the highest percentage increase, increasing its expenditures on average annually by 18.2 percent, from $4,396 per pupil in FY 2001. Cranston spent the lowest amount on ESL programs of the peer districts, increasing its expenditures from $2,944 per pupil in FY 2001 to $4,026 per pupil in FY 2005.

Pawtucket had the highest Title 1 expenditures per pupil in FY 2005, with $714 per pupil in FY 2005. The lowest amount was spent in East Providence, accounting for $423 per pupil in FY 2005. The highest percentage increase was in Pawtucket. This district increased its expenditures on average annually by 19.7 percent, from $348 per pupil in FY 2001 to $714 per pupil in FY 2005.

3. School District Revenue Trends and Property Values

Local, state and federal revenue trends

- In Warwick, total local, state and federal revenues to support its public schools increased from $122.9 million in FY 2001 to $147.1 million in FY 2005, representing an increase of $24.2 million;
- Of the $24.2 million increase, $18.2 million was derived from local sources, $3.4 million from State aid, and the $2.3 million balance from new federal sources. In other words, for every new dollar in revenue between FY 2001 and FY 2005, Warwick generated $0.76 from local funds, $0.14 from State funds and $0.10 from federal funds;
- Approximately 70.6 percent of the Warwick school district was supported with local funds, 25.1 percent with State funds and 4.3 percent from the federal government;
- The five peer districts have as a median 62.4 percent of their revenues come from local sources, 32.9 percent from State and 6.0 percent from federal sources in FY 2005;
- When compared to its peers, Warwick's school budget received the highest percentage (70.6 percent) from local sources in FY 2005, while Pawtucket had the lowest percentage (27.6 percent) among the peer districts;
- Conversely, Warwick demonstrated the least reliance on State funding, with only 25.1 percent of its funding coming from State sources in FY 2005.

Revenues per Pupil

- On a per pupil basis, Warwick received $10,020 in total revenues in FY 2001. This increased to $12,370 in FY 2005, representing a growth of $2,349 per pupil. In both fiscal years 2001 and 2005, Warwick's total revenue per pupil ranked highest among its peers. In FY 2005, per pupil revenues among the peer school districts ranged from a low of $10,956 per pupil in Cranston to a high of $12,370 per pupil in Warwick;
- The median per pupil revenues for the peer districts increased from $9,084 per pupil in FY 2001 to $11,508 per pupil in FY 2005. North Providence (28.9 percent) and East Providence (26.7 percent) were both among the median increase, while Warwick experienced the lowest growth, increasing per pupil revenues by 23.4 percent between FY 2001 and FY 2005.

Property Values

- The full market value of property has been driven primarily by rapid growth in residential values. Statewide, residential values represent approximately 73.0 percent of the total property tax base, while commercial and industrial properties represent 17.5 percent and motor vehicles represent 7.6 percent of total value;
- Warwick has approximately 58.5 percent of the property wealth is in residential while 28.4 percent is in commercial and industrial;
- Warwick's FY 2006 property value per pupil of $883,860 ranks 2nd highest among its peers and is 7.6 percent above the State property value per pupil; and
- Warwick's property tax levy increased from $136.7 million to $171.6 million between 2000 and 2006. While the city's property tax levy is the largest among the peer communities, its growth rate of 25.5 percent has remained below the State average of 29.5 percent and is among the lowest within its peer group.

Tax Burden

- Warwick's effective property tax rate of $16.13 is projected to rank 6th highest overall, and 3rd highest among the peer communities; and
- In FY 2006, the estimated property tax bill on a $350,000 home would range from a high of $6,428 in Cranston to a low of $4,369 in East Providence. Warwick's projected tax bill would rank 12th highest in the State and 3rd highest among its peers.

State Aid

- Warwick receives approximately $58.2 million in State aid from various programs, which in turn funds nearly 23.0 percent of the City's total operating budget. This is the lowest among the peer communities;
- From FY 2000 to FY 2006, Warwick's total state aid package increased by $17.3 million, increasing at an average annual rate of 6.0 percent since 2000. This compares to an average annual rate of 6.7 percent statewide;
- The majority of Warwick's aid comes in the form of school aid, where 65.1 percent ($37.9 million) of all its aid is derived. This compares to 74.3 percent statewide. The school aid component of Warwick's aid package has been growing at an average annual rate of 2.9 percent since FY 2000, compared to 4.7 percent statewide;
- Non-school aid represents approximately 34.9 percent ($20.3 million) of the City's total aid package. While the City's municipal aid has increased at an average annual rate of 14.1 percent since FY 2000, this remains below the State average (14.4 percent) and lags all its peer communities save Pawtucket.

Direct Education Aid

- Statewide, direct education aid increased from $515.1 million in FY 2000 to $668.0 million in FY 2006 – representing a $152.9 million increase in State education aid during this period. This translates into an average annual rate of growth of 4.4 percent;
- The peer communities experienced a 4.3 percent average annual rate of growth in direct education aid during this period. Warwick state education aid increased on average by 2.9 percent, from $30.8 million in FY 2000 to $36.5 million in FY 2006.

The following section provides an overview of the source (local, state, and federal) and the amount of revenues. It also looks at revenues per pupil and how these trends have changed over time. The analysis will also provide information on the property tax base, property values, tax rates and burdens, as well as tax capacity and effort index.

School District Revenue Trends

The school district revenue trends are based on revenue data provided by the Rhode Island Department of Education. Local revenues include the appropriation the school districts receive from the city or town, as well as revenues from the sale of food services and other miscellaneous revenues. State revenues include state aid and revenues related to Medicaid (please note that Warwick classifies Medicaid revenues as a local source of revenues in its school budget). They do not include the State's share of the teacher retirement contribution or the State's housing aid program. Federal revenues include the revenues that the districts receive from the federal government through the Rhode Island Department of Education. The majority of these funds are distributed through the Federal Title I program.

Total Revenues – In Warwick, total local, state and federal revenues increased from $122.9 million in FY 2001 to $147.1 million in FY 2005, representing an increase of $24.2 million (19.7 percent). Of the $24.2 million increase, $18.5 million was derived from local sources, $3.4 million from State aid, and the $2.3 million balance from new Federal sources. In other words, for every new dollar in revenue between FY 2001 and FY 2005, Warwick generated $0.76 from local funds, $0.14 from State funds and $0.10 from federal funds.

FY 2001 - FY 2005 School District Revenues

	FY 2001				FY 2005				2001 - 2005 Change			
	Local	State	Federal	Total	Local	State	Federal	Total	Local	State	Federal	Total
Cranston	$61.6	$30.9	$4.9	$97.4	$78.4	$35.4	$7.8	$121.6	$16.8	$4.5	$2.9	$24.2
East Providence	33.3	23.8	2.9	60.0	37.8	27.6	4.2	69.6	4.5	3.8	1.3	9.6
North Providence	19.6	11.7	1.2	32.5	26.0	13.7	2.0	41.7	6.4	2.0	0.8	9.2
Pawtucket	25.6	54.8	7.2	87.6	29.0	63.9	12.3	105.2	3.4	9.1	5.1	17.6
Warwick	85.4	33.5	4.0	122.9	103.9	36.9	6.3	147.1	18.5	3.4	2.3	24.2
Peer Total	$225.5	$154.7	$20.2	$400.4	$275.1	$177.5	$32.6	$485.2	$49.6	$22.8	$12.4	$84.8

Revenues include revenues from food service and Medicaid.

Source: RI Dept. of Education, school budget documents and RIPEC calculations.

The Warwick School District had different rates of growth by the three revenue sources. Local funding for Warwick schools increased by 21.7 percent from FY 2001 to FY 2005, while State aid increased by 10.1 percent, from $33.5 million in FY 2001 to $36.9 million in FY 2005. Federal funds experienced the greatest growth, increasing from $4.0 million in FY 2001 to $6.3 million in FY 2005, a 57.5 percent increase.

When comparing overall growth in revenues among the peer school districts, growth in revenues ranged from a low of 16.0 percent in East Providence to a high of 28.3 percent in North Providence. When compared to its peers, Warwick had the second lowest

revenue growth rate between FY 2001 and FY 2005. This is mainly a function of comparatively low growth rates in revenues from the State and the federal government. When compared to its peers, Warwick ranked lowest in the revenue growth received from the State. Between FY 2001 and FY 2005, State revenues in Warwick grew by 10.1 percent. The other peer districts' revenues from the State increased from a high of 17.1 percent in North Providence to a low of 14.6 percent in Cranston.

The reliance on local support for the Warwick school district is also visible when looking at the share of the revenue growth. While $0.76 of every new dollar spent came from local sources in Warwick – the highest among its peers – Pawtucket derived only $0.19 of every new dollar spent between FY 2001 and FY 2005 from local revenues.

Each community has a different mix of revenues in supporting its budget. Over time, the mixture of revenues has also changed for each community. In Warwick, in FY 2001 approximately 69.5 percent of the school district's budget was supported with local funds, 27.3 percent with State funds and 3.3 percent from the federal government. This has changed since. In FY 2005, both the local and federal share increased by a percentage point to 70.6 percent and 4.3 percent respectively. In contrast, the State share fell to 25.1 percent in FY 2005.

As noted before, the Rhode Island Department of Education classifies Medicaid revenues as State revenues. If these Medicaid revenues were included as Federal revenues, Warwick's share of State funds in FY 2001 would be 26.3 percent and the Federal share 4.2 percent. In FY 2005, the State share would decline to 23.9 percent and the Federal share increase to 5.4 percent.

FY 2001 - FY 2005 Source of Funding (in percent)

	FY 2001			FY 2005		
	Local	State	Federal	Local	State	Federal
Cranston	63.2%	31.7%	5.0%	64.5%	29.1%	6.4%
East Providence	55.5%	39.7%	4.8%	54.3%	39.7%	6.0%
North Providence	60.3%	36.0%	3.7%	62.4%	32.9%	4.8%
Pawtucket	29.2%	62.6%	8.2%	27.6%	60.7%	11.7%
Warwick	69.5%	27.3%	3.3%	70.6%	25.1%	4.3%
Peer Group Median	60.3%	36.0%	4.8%	62.4%	32.9%	6.0%

Revenues include revenues from food service and Medicaid.
Source: RI Dept. of Education, and RIPEC calculations.

For the five peer districts, revenues from local sources in FY 2005 were at 62.4 percent as a median, 32.9 percent from State and 6.0 percent from Federal sources in FY 2005. For the peer group as a whole, the portion of the school budget coming from local and Federal sources increased since FY 2001 while the State share declined. While Warwick relies more heavily on local revenues than its peers, it relies less on State and Federal funds. When compared to its peers, Warwick's school budget received the highest

percentage (70.6 percent) from local sources in FY 2005, while Pawtucket had the lowest percentage (27.6 percent) among the peer districts.

Conversely, Warwick demonstrated the least reliance on State funding, with only 25.1 percent of its funding coming from State sources in FY 2005. This is almost 8.0 percentage points below the peer district median of 32.9 percent. Pawtucket leads the peer districts with 60.7 percent of its resources coming from State sources.

Revenues Per Pupil – On a per pupil basis, Warwick received $10,020 in total revenues in FY 2001. This increased to $12,370 in FY 2005. This represents a growth in per pupil revenues of $2,349 or 23.4 percent during that time period. In both fiscal years 2001 and 2005, Warwick's total revenue per pupil ranked highest among its peers. In FY 2001, Warwick's total revenue per pupil was 10.3 percent above the peer group median. This has since declined to 7.5 percent above the peer median in FY 2005. If enrollment had remained constant in Warwick, per pupil revenues would have equaled $11,993 per pupil. Therefore, RIPEC estimates that of the $2,349 revenue per pupil increase over this period of time, $377 per pupil (16.0 percent) of the growth is attributable to declining enrollment and $1,976 per pupil (84.0 percent) is attributable to growth in revenues.

FY 2001 - FY 2005 Per Pupil School District Revenues

	FY 2001				FY 2005				FY 2001 - FY 2005 Change			
	Local	State	Federal	Total	Local	State	Federal	Total	Local	State	Federal	Total
Cranston	$5,580	$2,799	$444	$8,822	$7,064	$3,189	$703	$10,956	$1,484	$391	$259	$2,133
East Providence	5,042	3,603	439	9,084	6,250	4,563	694	11,508	1,208	960	255	2,424
North Providence	5,523	3,297	338	9,158	7,359	3,878	566	11,803	1,837	581	228	2,645
Pawtucket	2,542	5,442	715	8,700	3,060	6,743	1,298	11,102	518	1,301	583	2,402
Warwick	6,963	2,731	326	10,020	8,737	3,103	530	12,370	1,774	372	204	2,349
Peer Group Median	$5,523	$3,297	$439	$9,084	$7,064	$3,878	$694	$11,508	$1,484	$581	$255	$2,402

Revenues include revenues from food service and Medicaid.

Source: RI Dept. of Education, and RIPEC calculations.

The median per pupil revenues of the peer school districts increased from $9,084 per pupil in FY 2001 to $11,508 per pupil in FY 2005. Therefore, the five peer districts experienced an increase of $2,402 in revenues per pupil. North Providence and East Providence were both above the median increase, increasing revenues by 28.9 percent and 26.7 percent respectively, while Warwick experienced the lowest growth, increasing per pupil revenues by 23.4 percent between FY 2001 and FY 2005. However, in both fiscal years, Warwick's per pupil revenues were the highest among the peer districts. In FY 2005, per pupil revenues among the peer school districts ranged from a low of $10,956 per pupil in Cranston to a high of $12,370 per pupil in Warwick.

Property Wealth Trends

In looking at the different ways to measure property tax burdens, there is no one perfect measure. It is important to understand what has happened to property values over time, the different demands on municipal budgets, and the strengths and weaknesses of different measures of burden. Each measure of property tax burden discussed below provides different perspectives on how Warwick compares with the State and its peer

communities. Regardless of the measure, it appears that the City of Warwick ranks in the top third in the State – however, its burden is generally lower than its peer communities. Given the level of investment the City makes in its schools compared to the State and the peer communities, it appears that the City is accomplishing this level of investment with property tax burdens that are relatively competitive with the State and its peer communities.

Median Sales Price – The local housing market in Rhode Island has experienced significant gains in the last six years. Since 2000, the median selling price of a single family home has more than doubled, increasing from nearly $136,000 to a projected $297,400 in 2006 – an 118.7 percent increase over this six-year period. Rhode Island's housing prices have continued to increase faster than personal income in the state, which has increased by nearly 29.0 percent from 2000 to 2006. Personal income has experienced an average annual rate of growth of 4.3 percent since 2000, while the average annual rate of growth in single family home prices was 13.9 during the same period. Growth in Rhode Island's median sales price accelerated in 2002 and 2003, with growth rates exceeding 20.0 percent in these two years.

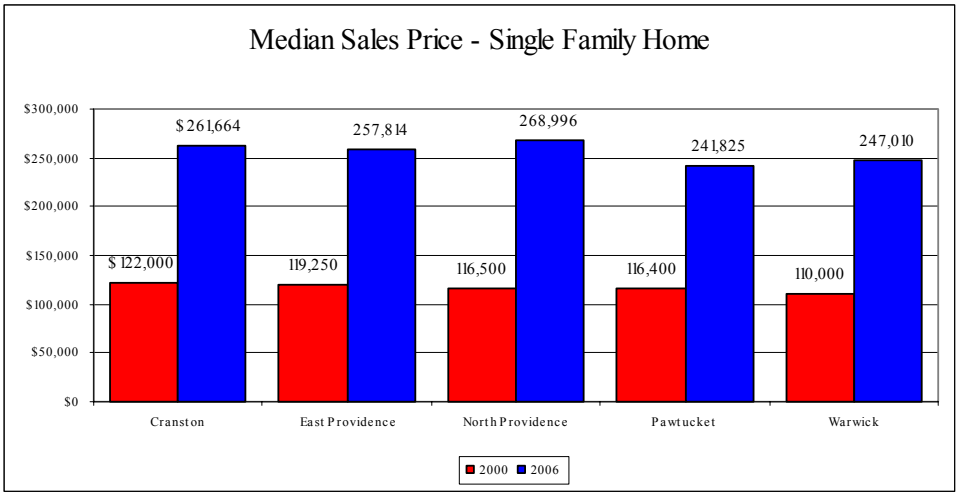
Median Single Family Home Sales Price and Personal Income in Rhode Island

Calendar Year	Median Price	Change	Personal Income*	Change
2000	$135,976	7.9%	$30.7	6.6%
2001	156,000	14.7%	32.5	5.8%
2002	188,150	20.6%	33.2	2.2%
2003	230,000	22.2%	34.5	3.9%
2004	264,700	15.1%	36.5	5.7%
2005	*272,843*	3.1%	*38.0*	4.2%
2006	*297,360*	9.0%	*39.6*	4.2%
2000-2006	$161,384	118.7%	$8.9	29.0%

**Personal Income data is in billions*

Source: RIPEC Calculations based on Rhode Island Association of Realtors and Bureau of Economic Analysis Data

Among the five peer communities several key trends are worth noting. First, two of the five communities' median sales prices experienced faster growth than the State median (North Providence and Warwick). However, none of the peer communities have median sales prices that are at or exceed the State median. North Providence experienced the greatest change during this period. With the fastest rate of growth (130.9 percent) from 2000 to 2006, the Town's median sales price increased from 3rd highest among its peers in 2000 to the highest in 2006. Its median sales price as a percentage of the State median increased from 85.7 percent in 2000 to 90.5 percent in 2006.



The City of Warwick's median sales price continues to lag its peer communities. In 2000, Warwick's median sales price of $110,000 was the lowest among its peers and was 81.0 percent of the State median. In 2006, Warwick's projected median sales price of $247,010 surpassed Pawtucket, but remains among the lowest among its peers. However, Warwick's median sales price of a single family home has gained on the State median – now representing 83.1 percent of the State median. The gain is a result of faster growth in prices in Warwick (124.6 percent) from 2000 to 2006 than the State median during this period (118.7 percent).

Property Tax Base – With the significant changes in the real estate market, one can imagine the impacts it has on the total property wealth for each community. Statewide, estimated full market value of property (all real and tangible property at 100 percent of value) has increased from $59.9 billion in FY 2000 to $126.8 billion in FY 2006 – a 112.0percent change during this period.

One should note there are some limitations to the data presented. The estimated full market value of property is a RIPEC estimate based on data developed by the State's Office of Municipal Affairs. This data includes samples of sales data and the most recent full revaluation or statistical update of property values. Fiscal Year 2006 data is based on the tax roll as of December 31, 2004.

Among the peer communities, growth in the estimated full market value of property ranged from 56.7 percent in East Providence to 112.6 percent in North Providence. Among the peer communities, Warwick has the greatest amount of total value, estimated at $10.6 billion in FY 2006. This represented a 91.9 percent increase over FY 2000 values. Warwick's full market value represents approximately 8.4 percent of the value statewide, and nearly 35.0 percent of the value statewide is in the peer communities.

Clearly the total full market value of property has been driven primarily by rapid growth in residential values. Statewide, residential values represent approximately 73.0 percent of the total property tax base, while commercial and industrial properties represent 17.5

percent and motor vehicles represent 7.6 percent of total value. The 2.0 percent balance of the base includes utilities and other property.

Estimated Full Value of Property

Community	FY 2000	FY 2006	FY 2000 - FY 2006 Amount	FY 2000 - FY 2006 Percent
Cranston	$4,126,000,768	$7,578,691,889	$3,452,691,121	83.7%
East Providence	2,665,650,686	4,178,312,286	1,512,661,600	56.7%
North Providence	1,488,842,229	3,165,224,914	1,676,382,685	112.6%
Pawtucket	2,341,269,386	4,822,196,589	2,480,927,203	106.0%
Warwick	5,541,469,614	10,633,702,112	5,092,232,498	91.9%
State Total	$59,881,664,472	$126,789,057,560	$66,907,393,088	111.7%

Source: RIPEC calculations and data reported by the Office of Municipal Affairs

While each community has its own distribution of wealth by class of property, there are a few differences worth noting. First, Cranston, North Providence and Pawtucket have similar wealth distributions by class as compared to the State average. Both East Providence and Warwick have higher concentrations in commercial and industrial property wealth. In East Providence, approximately 64.0 percent of the City's wealth is in residential and 29.0 percent is in commercial and industrial property. In Warwick, approximately 58.5 percent of the property wealth is in residential while 28.4 percent is in commercial and industrial. It should also be noted that Warwick has nearly 12.0 percent of its property value in motor vehicles, the highest among its peer communities (third highest in the State).

Share of Real and Tangible Property

Community	Residential	Commercial	Industrial	Vehicles	Other
Cranston	72.8%	14.4%	3.9%	7.8%	1.1%
East Providence	64.0%	22.4%	6.6%	5.5%	1.5%
North Providence	74.9%	13.7%	1.1%	9.7%	0.6%
Pawtucket	74.6%	15.6%	4.6%	3.9%	1.3%
Warwick	58.5%	26.6%	1.8%	11.8%	1.3%
State Average	72.9%	14.9%	2.7%	7.6%	1.9%

Source: Office of Municipal Affairs

Residential property value change is clearly the largest influence on each community's overall property wealth. However, changes in commercial property wealth in East Providence and Warwick have greater influences on their overall property wealth given it makes up a significantly larger portion of their total property wealth. As we will see later

in this analysis, this has also translated into moving towards greater classification of property for taxation purposes.

What is interesting is when one expresses the data on a per pupil basis. This will be a function of changes in student enrollment and property value over time. Statewide enrollment from 2000 to 2006 is projected to decline by 1.0 percent during this period while full market value is expected to increase by 112.0 percent. Therefore, the value per pupil statewide increased from $385,500 in FY 2000 to a projected $821,705 in FY 2006 – a 113.2 percent increase during this period.

Full Market Value Per Pupil

Community	2000	Percent of State	2006	Percent of State	Change
Cranston	$377,701	98.0%	$684,059	83.2%	81.1%
East Providence	402,484	104.4%	668,316	81.3%	66.0%
North Providence	423,207	109.8%	898,701	109.4%	112.4%
Pawtucket	236,396	61.3%	498,934	60.7%	111.1%
Warwick	451,848	117.2%	883,859	107.6%	95.6%
State Average	$385,460		$821,705		113.2%
Peer Average	$378,327	98.1%	$726,774	88.4%	92.1%

Together, the five peer communities experienced a 87.9 percent increase in their total full market value during this period, while together their enrollment declined by 1.6 percent. Therefore, the average property value per pupil for the peer communities increased from $378,300 in FY 2000 to $726,800 in FY 2006 – a 92.1 percent increase in the value per pupil. Over this period of time, the peer communities' value per pupil did not keep up with the State per pupil. In FY 2000, three communities (including Warwick) had value per pupil that exceeded the State value per pupil. In FY 2006, North Providence and Warwick were the only communities to continue to exceed the State value per pupil.

Among the peer communities, North Providence led the way with $898,700 in property value per pupil in FY 2006. This represents a 112.4 percent increase since FY 2000 – the fastest rate of growth among the peer communities. Warwick's FY 2006 property value per pupil of $883,860 ranks 2nd highest among its peers and is 7.6 percent above the State property value per pupil. This level of property value per pupil is 21.6 percent higher than the average among the peer communities. If one were to remove Warwick from the peer community average, the peer community property value per pupil would drop from $726,774 to $687,503 in FY 2006.

The change in Warwick over this period of time is a function of a projected 2.0 percent decline in enrollment and a 91.9 percent increase in market value. In 2000, Warwick's value per pupil of $451,850 was 17.2 percent above the state value per pupil. As noted above, this has since decreased to 7.6 percent in FY 2006.

Property Tax Levies - The property tax levy is the amount of property taxes raised in the community. Statewide, communities raised nearly $1.7 billion in FY 2006 – a $394.5 million increase since FY 2000 (29.5 percent). The peer communities raised $513.4 million in FY 2006 – overall representing a 27.8 percent increase during this period.

Rhode Island Property Tax Levy (Millions)

Community	Total Levy FY 2000	Total Levy 2006	Actual Change	Percent Change	Percent of Levy: Municipal FY 2000	Percent of Levy: Municipal FY 2006	Percent of Levy: School FY 2000	Percent of Levy: School FY 2006
Cranston	$102.3	$145.3	$43.0	42.1%	49.4%	46.0%	50.6%	54.0%
East Providence	59.3	72.6	13.3	22.5%	45.0%	47.0%	55.0%	53.0%
North Providence	37.9	50.6	12.7	33.5%	48.4%	46.4%	51.6%	53.6%
Pawtucket	65.6	73.3	7.7	11.7%	62.0%	63.0%	38.0%	37.0%
Warwick	136.7	171.5	34.8	25.5%	40.3%	36.6%	59.7%	63.4%
State Total	**$1,335.6**	**$1,730.1**	**$394.5**	**29.5%**	**46.5%**	**44.2%**	**53.5%**	**55.8%**

Source: Office of Municipal Affairs and RIPEC calculations.

The City of Warwick's property tax levy increased from $136.7 million to $171.58 million during this period – a $34.8 million increase (25.5 percent) over the six years. The City of Warwick's property tax levy is the largest among the peer communities, but growth in the local levy has remained below the State average and is among the lowest within its peer group. It should be noted that the City of Cranston has increased its local property tax levy the fastest, increasing from $102.3 million in FY 2000 to $145.3 million in FY 2006 – a 42.1 percent increase during this period of time.

If one compares the peer communities in terms of growth in local levies from FY 2005 to FY 2006, additional information can be derived. Statewide, the levy increased by $78.9 million, or 4.8 percent. Among the peer communities, growth rates ranged from a low of 1.9 percent in Cranston to a high of 8.0 percent in East Providence. Overall, the City of Warwick ranked 19th among the 39 cities and towns with a 6.0 percent increase in its levy. Warwick ranked 3rd highest among its peer communities.

On average, Rhode Island communities allocated 44.2 percent of the local property tax levy to municipal services and 55.8 percent for educational purposes in FY 2006, a shift from FY 2000. Warwick allocates more of its local property tax levy to school services (63.4 percent) than the State average as well as all its peer communities. Conversely, it allocates less of its levy for municipal services than both the State and its peers. This is partially a function of local school spending decisions, relative municipal needs and what has evolved over time in terms of State aid for schools (to be discussed later in this report).

Property Tax Rates and Burdens – Property taxes serve as the largest single source of revenue for the Ocean State's municipalities, playing a critical role in financing local public services. Rhode Island's dependence on the property tax is significantly greater than most states. However, within Rhode Island, there is considerable variance among cities and towns.

The following discussion must be put in context. Because of classification, homestead exemptions and recent initiatives to phase-out certain property taxes (motor vehicles and inventory), all 39 municipalities essentially have some form of classified property tax structure, which makes inter-jurisdictional comparison difficult. Second, communities are on different revaluation and statistical update of property value schedules. Current law requires an update every three years. Therefore, if one only looks at actual property tax rates by class, one does not get a real picture of how the communities compare. Actual tax rates are only a function of the total local levy requirement and the values by class of property. And third, the State has embarked on a number of multi-year programs to phase-out inventory and motor vehicle taxes.

It should be noted that among the peer communities, only North Providence implemented a revaluation or statistical update of property for FY 2006. Both Cranston and Pawtucket are expected to complete one for FY 2007, and East Providence and Warwick are expected to implement another for FY 2008. Therefore, the changes in tax rates in North Providence are a result of both increasing values and changes in spending levels. However, just because the rate declined doesn't mean property tax levies declined. The Town of North Providence has reported it expects to collect $50.6 million in property taxes in FY 2006 – a $3.7 million, or 7.8 percent increase from FY 2005, despite lowering tax rates on all classes of property.

Looking at actual local property tax rates, homestead provisions and classified tax structures only provide one picture of the differences among the State's 39 cities and towns. This data, while useful, does not provide a full picture of how these differences translate into actual tax burdens, nor does the actual tax rate data clearly demonstrate the differences in the communities' tax base and ability to pay for essential services. Therefore, the remainder of the analysis looks at various ways to evaluate the differences in local property tax burdens.

The following table highlights FY 2006 actual property tax rates by class. It should be noted that the City of East Providence is always a fiscal year behind given the difference in fiscal years, but the information does provide enough for comparison purposes. Among the 39 cities and towns, Woonsocket has the highest real estate tax rates (unadjusted for homestead provisions) and New Shoreham continues to have the lowest. North Providence now has the highest tax rates on tangible property, with a rate of $60.65 per $1,000 of value.

Among the peer communities, actual residential tax rates range from a high of $23.23 per $1,000 of value in Cranston to a low of $15.46 per $1,000 in the City of Warwick. However, this does not take into account local homestead provisions provided in both

East Providence and North Providence. If one adjusts their residential property tax rates for the homestead provisions, they translate into lower rates (from $16.19 to $13.76 in East Providence and $16.55 to $13.24 in North Providence). This would obviously change the relative position of residential property tax rates among the peer communities. Commercial property tax rates (real property only) among the peer communities range from $30.80 in Cranston to $20.61 in East Providence. Tangible property tax rates range from $30.91 in Warwick to $60.65 in North Providence.

FY 2006 Property Tax Rates By Class

Community		Homestead Provision	Residential	Commercial	Inventory	Persoanlty	Vehicles
Cranston	12/31/2002	-	$23.23	$30.80	$5.81	$34.84	$42.44
East Providence	12/31/2003	Yes (1)	16.19	20.61	11.59	47.49	37.10
North Providence	12/31/2004	Yes (2)	16.55	22.50	13.16	60.65	41.95
Pawtucket	12/31/2002	-	17.91	26.87	15.63	52.09	53.30
Warwick	12/31/2003	-	15.46	23.18	9.55	30.91	34.60

(1) - East Providence has a 15% homestead provision
(2) - North Providence has a 20% homestead provision

Source: RIPEC Survey of Communities (note EP rates are for FY 2005)

The eleven-year phase out of the inventory tax requires each community to reduce its property tax rate on inventories by 10 percent each year until completely phased-out. The phase-out of the local motor vehicle tax requires that the tax rates imposed by communities in FY 1998 remain frozen. The State only recently began to further phase this tax out by increasing the exemption to $5,000, so the impact on local communities and their motor vehicle tax rates is uncertain. The rates among the peer communities do vary, ranging from $34.60 in Warwick to $53.50 in Pawtucket. One should note that among the peer communities, Warwick has the highest percentage of motor vehicle value as it relates to its total taxable value (11.8 percent) and has the lowest rate among its peers.

Actual rate information only tells you a small portion of the story. This information permits the reader to understand how different classes of property are treated under the local property tax structure, but it is limited in that it does not express relative tax burden, or how much the city or town is generating from the tax base.

Effective Property Tax Rates - Even with the changes occurring in the property tax structure, one is able to estimate the effective property tax rates for the peer communities for FY 2006. Effective tax rates reflect what each community's tax rate would have been if all property were assessed at 100 percent of its full value as estimated by RIPEC based on recent data provided by the Office of Municipal Affairs. The effective tax rate is the total levy divided by the estimated full market value of property within the community, adjusting for various exemptions and credits provided by the community. The effective tax rate provides a tool to compare the overall property tax burden in each community.

RIPEC has provided an estimate of FY 2006 effective tax rates based on further forecasting of full market value and FY 2006 property tax levies reported by the State's municipalities. According to this forecast, FY 2006 effective tax rates range from $21.94 per $1,000 of value in Providence to $2.84 per $1,000 of value in New Shoreham. Warwick is projected to rank 6th highest overall with an estimated effective tax rate of $16.13. This ranks the City 3rd highest among the peer communities.

Estimated Effective Property Tax Rates

Community	FY 2000	Rank	FY 2006	Rank
Cranston	$24.80	8	$19.18	2
East Providence	22.24	12	17.38	4
North Providence	25.45	*6*	15.99	7
Pawtucket	28.02	4	15.20	8
Warwick	24.67	9	16.13	6

Source: RIPEC estimates based on Office of Municipal Affairs data

Although this data is useful in gaining a general idea of property tax burden differences among communities, it does have limited utility. The effective tax rate only compares the overall effective property tax rate by community, not taking into account the various classification systems, homestead exemptions and other taxing authorities (e.g., fire districts) levying property taxes in Rhode Island. All these factors impact property tax burden and rate comparisons among the communities.

Percent of Levy - Rhode Island's 1985 Property Tax Relief and Replacement Act was designed to restrict the growth in property taxes and to expand the State's role in funding public education. The Act placed a 5.5 percent cap on property tax levy growth in each city or town. The cap may be applied to either the actual levy or the growth in tax rates.

Property Tax Levy as Percent of Full Value

Community	FY 2000	Rank	FY 2006	Rank
Cranston	2.5%	8	1.9%	2
East Providence	2.2%	12	1.7%	4
North Providence	2.5%	*6*	1.6%	7
Pawtucket	2.8%	4	1.5%	8
Warwick	2.5%	9	1.6%	6

Source: RIPEC estimates based on Office of Municipal Affairs data

In 1980 Massachusetts voters approved an initiative designed to reduce property taxes by 40.0 percent. While Proposition 2½ had a number of provisions worth noting, the key to the program was to prohibit property tax levies from exceeding 2½ percent of the full and fair cash value of the local tax base. This was designed to limit the net growth in property tax levies based on the market value of property in the community. There is currently no such provision in Rhode Island's property tax cap structure.

The property tax levy as a percent of full market value is another way of expressing the effective tax rate noted above. If Rhode Island had such a provision, none of the State's communities would be at or above the threshold in FY 2006 – primarily due to rapid growth in the State's property tax base. Warwick's tax levy as a percent of full market value remains slightly above 1.5 percent, ranking Warwick 6th highest in the State.

Taxpayer Profiles - In order to provide another method to measure relative property tax burden, RIPEC developed the following analysis that looks at the relative tax burdens for a $350,000 home and a hypothetical commercial property with $1.0 million in real estate value and $200,000 in tangible property value. The analysis reports both the projected property tax bill under each scenario as well as the projected effective tax burden by community. The effective property tax burden is the tax bill divided by the market value of the property in each Rhode Island community.

The value of the house is adjusted in each community by the ratio of assessment, which estimates what a single family home would actually be assessed at as a percentage of its actual market value (in this case $350,000 or the median selling price). The ratio will differ among communities principally due to the timing of the most recent revaluation of property. For example, recent experience has shown that communities that have conducted statistical updates of their property values have revised assessed values reflecting approximately 96.7 percent of market values. Similarly, experience has shown that the implementation of a revaluation of property will result in assessed values reflecting, on average, 98.2 percent of actual market values in the year the revaluation is implemented.

In other words, while statistical updates and revaluations are designed to account for market change, communities are always faced with a fluid real estate market, and these updates of values become stale very quickly given market trends. Note that among the peer communities, only North Providence enacted a revaluation of property values in FY 2006. Therefore, its assessed values are projected to closely reflect market trends for taxing purposes.

The estimated tax on the home is calculated based on existing homestead provisions and FY 2006 residential property tax rates. For those communities that have local property taxes assessed by fire districts, the analysis uses the highest fire tax rate within the community. As the tables show, the relative burden does change when fire districts are taken into account.

Taxpayer Profile - $350,000 Home - RIPEC estimates that the average FY 2006 property tax bill on a $350,000 home in the State would be approximately $4,304. As the table above shows, this would represent an effective tax rate of 1.23 percent. This represents an improvement over FY 2005, where the overall effective tax burden was 1.32 percent. The improvement in the effective tax rate is more a function of faster growth in values than in growth in local levies. In other words, because of rapid growth in the residential market, the ratio of assessments in most communities have degraded, thereby showing even greater disparity between assessed values and actual market value in the tax year. Another way to look at it is that given most communities did not conduct a revaluation or statistical update in FY 2006, one would expect to see a growing gap between assessed values and market value.

Estimated Property Tax Burden
($350,000 Home)

Community	Tax Bill	ETR	Rank	% of State
Cranston	$6,428	1.84%	1	149%
East Providence	4,369	1.25%	25	102%
North Providence	4,551	1.30%	18	106%
Pawtucket	4,941	1.41%	10	115%
Warwick	4,921	1.41%	12	114%
State Total	**$4,304**	**1.23%**	**-**	**-**

ETR = Effective Tax Rate

Source: RIPEC Calculations

In FY 2006, the estimated property tax bill on a $350,000 home would range from a high of $6,428 in Cranston to a low of $1,000 in New Shoreham. Cranston's estimated property tax bill on a home valued at $350,000 would be 50.0 percent higher than the State average. Warwick's projected tax bill of $4,921 would rank 12th highest in the State and 3rd highest among its peer communities.

Commercial Property - How communities treat commercial real and tangible property differs. Communities often employ different rates or homestead exemptions to ensure that the property tax burden on commercial property is higher than on residential property. In this analysis, RIPEC assumed a $1.0 million real property venture with $200,000 in tangible goods was located in each of the 39 Rhode Island municipalities. Communities tax both real and tangible property, albeit at different rates.

RIPEC estimates that the average FY 2006 property tax bill on this commercial property would be approximately $20,046. This would represent an effective tax rate of 2.0 percent. The estimated property tax bill would range from a high of $44,225 in Providence (with an effective tax rate of 4.4 percent) to a low of $3,654 (with an effective tax rate of 0.2 percent) in New Shoreham. Providence's estimated property tax bill on a commercial venture would be twice the State average.

Warwick's estimated commercial tax burden of $27,265 would be 36.0 percent above the State average, representing an effective tax rate of 2.73 percent. This would rank 10th highest in the State, but would be the lowest among the peer communities. North Providence would rank highest among the peer communities with an effective tax rate of 3.42, which would also rank it 4th highest in the State. Note that all peer communities would rank in the top ten in terms of effective property tax burdens for commercial property.

Estimated Property Tax Burden
($1.0 Million Commercial with $200,000 in Tangible)

Community	Tax Bill	ETR	Rank	% of State
Cranston	$31,320	3.13%	6	156%
East Providence	28,192	2.82%	9	141%
North Providence	34,225	3.42%	4	171%
Pawtucket	31,596	3.16%	5	158%
Warwick	27,265	2.73%	10	136%
State Total	**$20,046**	**2.00%**	**-**	**-**

ETR = Effective Tax Rate

Source: RIPEC Calculations

State Aid to Cities and Towns

State aid – both municipal and education – plays a fundamental role in how local services are financed, the relative burden placed on local property taxpayers as well as relative equity in the eyes of State and local policy makers. The state is anticipated to distribute $960.5 million in aid in FY 2006 statewide. The City of Warwick will receive $58.2 million of this aid in FY 2006 – approximately 6.1 percent of the total aid. This represents a slight decline from FY 2000, where Warwick received 6.3 percent of the State's total aid package. It should be noted that there are several other State aid programs, such as library aid and the state program to assist in funding local statistical updates of real property. However, these funds represent a small portion of the State's total aid package and therefore are not discussed in this analysis.

Total State Aid

Communtiy	2000	2006	Change	Percent Change	Ave-annual Change
Cranston	$37.8	$58.9	$21.2	56.1%	7.7%
East Providence	25.4	36.5	11.1	44.0%	6.3%
North Providence	14.2	22.5	8.3	58.0%	7.9%
Pawtucket	56.4	84.1	27.7	49.2%	6.9%
Warwick	40.9	58.2	17.3	42.2%	6.0%
Peer Total	*$174.7*	*$260.3*	*$85.6*	*49.0%*	*6.9%*
State	**$650.9**	**$960.5**	**$309.6**	**47.6%**	**6.7%**

Source: RIPEC calculations based on House Fiscal Staff Data

From FY 2000 to FY 2006, the City of Warwick's total state aid package increased by $17.3 million. Overall, the City's total aid package has increased at an average annual rate of 6.0 percent since FY 2000. This compares to an average annual rate of 6.7 percent statewide. Among the peer communities, Warwick's rate of growth continues to lag the group. The average annual rate of growth for the peer communities as a group was 6.9 percent. North Providence's total aid package has grown the fastest – at 7.9 percent since FY 2000. This is in part due to its recent status as a "distressed community" under the distressed community relief program.

The majority of Warwick's aid comes in the form of school aid, where 65.1 percent ($37.9 million) of all its aid is derived. This compares to 74.3 percent statewide. The school aid component of Warwick's aid package has been growing at an average annual rate of 3.0 percent since FY 2000, compared to 4.7 percent statewide. This also represents the slowest growth among its peer communities. Both East Providence (73.7 percent) and Pawtucket (79.0 percent) receive a greater portion of the total aid in the form of school aid than Warwick.

Conversely, non-school aid, or municipal aid as it will be referred to in this analysis, represents approximately 34.9 percent ($20.3 million) of Warwick's total aid package. This includes both direct and indirect aid. While the City's municipal aid has increased

at an average annual rate of 14.1 percent since FY 2000, this remains below the State average (14.4 percent) and lags all its peer communities save Pawtucket. The majority of the growth in municipal aid has been in both the State's general revenue sharing program and the phase out of the excise tax on motor vehicles. Note that the increase in aid for the phase out is intended to replace revenues foregone due to eliminating the tax over time.

There are eight major State Aid Programs to cities and towns in Rhode Island:

- Public Service Corporations Tax;
- Payment-in-Lieu-of Taxes (PILOT);
- General Revenue Sharing
- Distressed Community Relief Fund;
- Phase-out of the Excise Tax on Motor Vehicles;
- Meals and Beverage Tax-Sharing Program;
- Direct Education Aid; and
- School Construction Aid (Housing Aid).

Each State aid program provides a different level of support to the City of Warwick due to the various formulas involved. The following highlights each of the State aid programs and how they impact Warwick. For more details on each of the formulas, RIPEC recommends the House Fiscal Staff's FY 2005 publication – *Rhode Island Local Aid*. It provides additional information and insight into each of the major State aid programs. RIPEC has also published reports on education aid that may prove useful.

State aid as a Percent of Local Operating Budgets - Warwick receives approximately $58.2 million in State aid from various programs, which in turn funds nearly 23.0 percent of the City's total operating budget. This is the lowest among the peer communities. Pawtucket has the highest concentration of state aid, where it funds slightly more than half (51.8 percent) of its operating budget. While this is a function of many variables, it does show that relative to the other peer communities, state aid plays less of a roll in financing Warwick's day-to-day operations.

State Aid as Percent of FY 2006 Operating Budget

Communtiy	State Aid	Total Budget	Percent Aid
Cranston	$58.9	$215.6	27.3%
East Providence	36.5	119.7	30.5%
North Providence	22.5	74.1	30.3%
Pawtucket	84.1	162.3	51.8%
Warwick	58.2	256.7	22.7%
Peer Total	*$260.3*	*$828.4*	*31.4%*

Source: RIPEC calculations based on Community Budget Data

Public Service Corporation Tax – Tangible personal property (lines, cables, pipes and various equipment) of cable, telegraph and telecommunications corporations is exempt from local taxation but is subject to State taxation. Companies report the value of their tangible personal property to the Division of Taxation, and are derived by using the average ratio of assessment and property tax rate in the State. The funds collected (minus a small administrative fee) are then distributed to municipalities based on the most recent Census population figures. It should be noted that these funds are not reflected in the State's annual appropriations act because it is principally a pass-through operation, but are considered "indirect" state aid.

The following table provides trend data regarding the Public Service Corporation Tax. The total resources made available through this program increased from $12.8 million in FY 2000 to $14.6 million in FY 2006 – a $1.8 million increase. This translates into an average annual rate of growth for the program of 2.2 percent statewide. The entire program of $14.6 million represents 1.5 percent of the total state aid package ($960.5 million) in FY 2006.

Public Service Corporation Tax

Communtiy	2000	2006	Change	Percent Change	Ave-annual Change
Cranston	$1.0	$1.1	$0.1	13.9%	2.2%
East Providence	0.6	0.7	0.0	5.6%	0.9%
North Providence	0.4	0.5	0.0	10.5%	1.7%
Pawtucket	0.9	1.0	0.1	9.8%	1.6%
Warwick	1.1	1.2	0.1	9.9%	1.6%
Peer Total	*$4.0*	*$4.4*	*$0.4*	*10.2%*	*1.6%*
State	**$12.8**	**$14.6**	**$1.8**	**14.3%**	**2.2%**

Source: RIPEC calculations based on House Fiscal Staff Data

Taken together, the peer communities experienced an average annual rate of growth of 1.6 percent, and captured 22.2 percent of the net growth in the program statewide. Cranston experienced the fastest rate of growth during this period – posting growth at the State average. The City of Warwick received approximately $1.2 million in FY 2006 – a $107,300 increase since FY 2000. Warwick's share has declined slightly – from 8.5 percent to 8.2 percent during this period. The $1.2 million in Public Service Corporation Tax aid represents approximately 2.1 percent of the City's total aid program.

Meals and Beverage Tax – The General Assembly recently enacted a one percent of gross receipts tax upon each and every meal and/or beverage sold within the state in or from an eating and/or drinking establishment. The proceeds, while collected by the State division of taxation, are distributed to each city and town where the meals and beverages were delivered. As with the Public Services Corporation Tax, these funds are not reflected in the State's annual appropriations act because it is a pass-through operation, but are considered "indirect" state aid.

The following table provides trend data regarding the Meals and Beverage Tax. The tax and the distribution program did not take effect until FY 2004, therefore, there were no resources in FY 2000. In FY 2004, approximately $13.5 million was collected and distributed to the cities and towns. This has since increased to $17.7 million in FY 2006 – a $4.2 million increase since FY 2004. The entire program of $17.7 million represents 1.8 percent of the total state aid package ($960.5 million) in FY 2006.

Meals and Beverage Tax

Communtiy	2000	2004	2006	2004-06 Change
Cranston	$0.0	$1.0	$1.2	$0.2
East Providence	0.0	0.6	0.7	0.1
North Providence	0.0	0.3	0.4	0.1
Pawtucket	0.0	0.5	0.6	0.1
Warwick	0.0	1.7	2.2	0.4
Peer Total	*$0.0*	*$4.1*	*$5.1*	*$1.0*
State	**$0.0**	**$13.5**	**$17.7**	**$4.2**

Source: RIPEC calculations based on House Fiscal Staff Data

In FY 2006, Warwick expects to receive $2.2 million through this tax. This represents the largest share among the peer communities, second only to Providence statewide. Warwick receives approximately 12.6 percent of these resources statewide. The $2.2 million in Meals and Beverage Taxes represents approximately 3.8 percent of the City's total aid program. Note that Cranston is the second largest recipient among the peer communities, collecting $1.2 million through the program.

Payment-in-lieu-of-taxes (PILOT) – The program is designed to reimburse municipalities for property taxes that would have been collected on real property owned by a variety of nonprofits. State law prohibits local communities to levy property taxes on certain properties owned by eligible nonprofits, such as higher education, state facilities and hospital institutions. The program, established in 1986, has been expanded several times in terms of the eligible properties under the program and the rate of reimbursement. In FY 1998, the rate of reimbursement was increased from 25.0 percent to 27.0 percent. In FY 2003, the State scaled back its commitment in the program, appropriating 24.8 percent instead of the 27.0 percent that was required. The program has since been fully funded.

The State's appropriation for PILOT has increased from $16.1 million in FY 2000 to $27.0 million in FY 2006 – representing a $10.9 million increase during this period. This 67.9 percent increase translates to an average annual rate of growth of 9.0 percent. The PILOT program represents approximately 2.8 percent of the total State aid program of $960.5 million in FY 2006.

Taken together, the peer communities' PILOT funding grew at an average annual rate of 5.7 percent. On a percentage basis, North Providence experienced the greatest gains under the program during this period. However, it is the City of Cranston that relied the most on PILOT funding – it receives nearly $3.6 million of the $27.0 million statewide from this program. This represents nearly 13.4 percent of the program statewide. The City of Warwick received $0.7 million in FY 2000 and $0.8 million in FY 2006 – a $100,000 increase during the same period. In FY 2000, Warwick received 4.1 percent of every dollar in this program. This has since decreased to nearly 2.8 percent of every dollar allocated through this state aid program in FY 2006. The PILOT program represents less than 1.4 percent of the City's total aid package.

Payment in Lieu of Taxes

Communtiy	2000	2006	Change	Percent Change	Ave-annual Change
Cranston	$2.4	$3.6	$1.2	49.5%	6.9%
East Providence	0.1	0.1	0.0	-3.4%	-0.6%
North Providence	0.1	0.4	0.3	272.3%	24.5%
Pawtucket	0.5	0.3	-0.1	-31.4%	-6.1%
Warwick	0.7	0.8	0.1	15.5%	2.4%
Peer Total	*$3.7*	*$5.2*	*$1.5*	*39.7%*	*5.7%*
State	**$16.1**	**$27.0**	**$10.9**	**67.9%**	**9.0%**

Source: RIPEC calculations based on House Fiscal Staff Data

General Revenue Sharing – Reinstated in FY 1994, General Revenue Sharing is a program where the State distributes a percentage of total State tax revenue from the second fiscal year prior to municipalities. Second fiscal year prior means that FY 2006 aid is based on revenues collected in FY 2004. The distribution formula is based on per capita income and local property tax burden for public purposes (excludes education related expenses). The state distributes these funds based on local tax effort and income levels.

A major initiative has had a significant impact on this program. In FY 1998, the State embarked on a 10-year program to phase-out the local tax on wholesale and retail inventories. The State froze local tax rates at the FY 1999 levels and required municipalities to reduce the rates by 10.0 percent annually. The State was unable to determine the exact amounts in wholesale and retail inventory taxes collected by municipality, so the State was unable to determine the exact amount to be reimbursed. Therefore, rather than reimburse municipalities for the lost revenue based on estimated revenues foregone, the State has provided additional funding through the General Revenue Sharing Program by increasing the percent of state tax revenues dedicated to the program. One should note this is now an 11-year phase-out – the State enacted a one-year delay for FY 2003, pushing back the schedule one year.

General Revenue Sharing funding has increased from $27.6 million in FY 2000 to $65.3 million in FY 2006. This $37.8 million increase represents an average annual rate of growth of 15.5 percent. General revenue sharing represents 6.8 percent of the State's total local aid program of $950.1 million. Both the General Revenue Sharing Program and the Phase Out of the Excise Tax on Motor Vehicles represent the fastest growing programs during this period of time. The State provided 1.7 percent of tax revenues from the second prior year in FY 2000, but has since increased it to 3.0 percent in FY 2006.

General Revenue Sharing

Communtiy	2000	2006	Change	Percent Change	Ave-annual Change
Cranston	$2.0	$5.7	$3.6	179.7%	18.7%
East Providence	1.2	2.8	1.6	138.4%	15.6%
North Providence	1.0	2.3	1.4	137.8%	15.5%
Pawtucket	2.1	5.6	3.5	163.7%	17.5%
Warwick	2.4	4.9	2.5	104.0%	12.6%
Peer Total	*$8.7*	*$21.4*	*$12.6*	*144.6%*	*16.1%*
State	**$27.6**	**$65.3**	**$37.8**	**137.0%**	**15.5%**

Source: RIPEC calculations based on House Fiscal Staff Data

The peer communities increased by 16.1 percent annually compared to the State as a whole. Warwick received $2.5 million more in general revenue sharing in FY 2006 than in FY 2000. However, its average annual rate of growth of 12.6 percent lagged its peer communities and the State as a whole. Therefore, Warwick's share of the State's general revenue sharing program has declined, from 8.7percent in FY 2000 to 7.5 percent in FY 2006. General revenue sharing represents approximately 8.5 percent of the City's state aid.

Distressed Community Relief Fund – Established in FY 1990, the Distressed Community Relief Fund was designed to provide assistance to eligible communities that demonstrated extremely high property tax burdens relative to the rest of the state. There are four indices that are used to determine eligibility:

- Property tax levy as a percent of full market value of property;
- Full market value of property per capita;
- Income per capita; and the
- Percent of personal income to full market value of property.

Those communities that fall into the lowest 15.0 percent for at least three of the four indices are eligible to receive funding under the program. The distribution of these funds is based on the ratio of the eligible community's tax levy to the total tax levy of all eligible communities. There are currently six communities that receive aid under this program – Central Falls, North Providence, Pawtucket, Providence, West Warwick and Woonsocket. Warwick does not receive any state aid under this program, whereas

among the peer communities, both North Providence and Pawtucket receive aid under the program. In FY 2006, the statewide Distressed Community Relief Fund included $10.0 million, of which North Providence received $0.5 million and Pawtucket $1.6 million.

Phase-out of the Excise Tax on Motor Vehicles – As part of the State's FY 1998 Appropriations Bill, the General Assembly embarked on a program to eliminate excise taxes on motor vehicles. The program has since been frozen, but it has played a major role in State aid over the past five fiscal years.

Phase Out of Motor Vehicle Tax

Communtiy	2000	2006	Change	Percent Change	Ave-annual Change
Cranston	$4.4	$10.3	$5.9	135.9%	15.4%
East Providence	2.4	5.3	3.0	125.1%	14.5%
North Providence	1.8	4.2	2.5	141.7%	15.8%
Pawtucket	3.8	8.6	4.8	126.7%	14.6%
Warwick	5.1	11.3	6.2	122.4%	14.3%
Peer Total	*$17.4*	*$39.7*	*$22.4*	*129.1%*	*14.8%*
State	**$47.3**	**$112.3**	**$65.0**	**137.5%**	**15.5%**

Source: RIPEC calculations based on House Fiscal Staff Data

The program to eliminate the motor vehicle tax is designed to phase-out the tax by reducing vehicle values subject to motor vehicle excise taxes over an eight-year period (frozen in FY 2003). In FY 2006, the State expanded the program, exempting the first $5,000 in value from taxation – an increase of $500 from FY 2005. In order to ensure that local communities did not raise additional motor vehicle taxes during this period, the program requires communities to freeze motor vehicle excise tax rates at the FY 1998 level. The locally levied motor vehicle excise tax had been a source of growing revenue for many municipalities. Therefore, the State assumes a 100 percent collection rate on motor vehicles taxes. However, all communities historically have not collected 100 percent of the taxes levied due to slippage.

In FY 2000, municipalities received $47.3 million for the second installment of the phase-out. This has since grown to $112.3 million in aid statewide for the program in FY 2006. The program has experienced an average annual rate of growth of 15.5 percent - similar to the general revenue sharing program. The $112.3 million program to phase out the motor vehicle tax represents approximately 11.7 percent of the total aid package distributed by the State. One should note that communities are foregoing revenues they would have otherwise collected through the taxation of vehicles. Therefore, it is not a net gain in local resources.

Taken together, the peer communities experienced an average annual rate of growth of 14.8 percent, slightly less than the State as a whole. Only Cranston and North Providence kept pace with the state growth. Warwick, while receiving the most in funding ($11.3 million) under this program among its peers, has grown the slowest in terms of additional

aid received under the program (14.3 percent average annual rate of growth). Therefore, the City's share of the program has declined slightly from 10.7 percent in FY 2000 to 10.1 percent in FY 2006. The program's $11.3 million in funding to the City does represent 19.4 percent of the City's aid received from the State.

Direct Education Aid – Direct education aid, as discussed in this section, includes all education aid except State housing aid, teacher retirement and revenues related to Medicaid. Education aid has gone through significant changes since FY 1995. The state abandoned its long-standing education aid formula in FY 1995, which was designed to reimburse school districts for spending levels based on their relative wealth. However, the State could no longer keep up with the pace of school budget growth, and therefore stopped using the operating formula. Rather, the State began an annual ad-hoc process of establishing a series of formulas to distribute state education aid funding arguably linked to additional accountability. Regardless, the distribution of direct school aid represents the most fluid of State aid programs, principally due to its annually-negotiated process.

Direct Education Aid

Communtiy	2000	2006	Change	Percent Change	Ave-annual Change
Cranston	$27.1	$35.1	$8.1	29.8%	4.4%
East Providence	20.7	25.9	5.2	25.0%	3.8%
North Providence	10.3	12.8	2.5	24.5%	3.7%
Pawtucket	46.9	64.8	17.9	38.1%	5.5%
Warwick	30.8	36.5	5.7	18.5%	2.9%
Peer Total	*$135.8*	*$175.1*	*$39.3*	*29.0%*	*4.3%*
State	**$515.1**	**$668.0**	**$152.9**	**29.7%**	**4.4%**

Source: RIPEC calculations based on House Fiscal Staff Data

The State has made a conscious effort to target education aid to the State's urban schools through a series of formulas designed to drive resources to communities that demonstrate both relatively high property tax burdens and concentrations of low-income children. The peer communities have benefited more than Warwick given this predisposition of education aid allocation.

Statewide, direct education aid increased from $515.1 million in FY 2000 to $668.0 million in FY 2006 – representing a $152.9 million (29.7 percent) increase in State education aid during this period. This translates into an average annual rate of growth of 4.4 percent. Approximately 93.5 percent of the growth in education aid has come in the form of unrestricted aid – funds that while distributed under different categories can be used for supporting nearly any activity of the school district. The 6.5 percent balance of the growth has been in restricted aid, where the State must approve how the school district will spend these funds for specific purposes – primarily professional development. All direct education aid represents approximately 70.0 percent of the State's entire aid package to local government.

Taken together, the peer communities experienced a 4.3 percent average annual rate of growth in direct education aid during this period. Pawtucket, considered under several education formulas as a core urban community, experienced the fastest rate of growth during this period, growing at 5.5 percent annually. Warwick increased at the slowest rate – 2.9 percent annually during this period of time. Warwick state education aid increased from $30.8 million to $36.5 million during this period – representing a 18.5 percent increase. The City received nearly 6.0 percent of the School aid statewide in FY 2000 – this has since declined to 5.5 percent in FY 2006. The school aid program for Warwick of $36.5 million represents 62.7 percent of the City's total state aid program.

Within direct education aid, there are a series of categories of aid, albeit principally for distribution purposes rather than for specific uses of the aid allocated to school districts. The table below summarizes the categories of aid for FY 2006.

FY 2006 Warwick School Aid

State Education Aid Program	2000	2006	Change
General	$27,089,169	$29,913,390	$2,824,221
Student Equity	1,892,166	3,275,204	1,383,038
Literacy	830,225	873,802	43,577
Early Childhood	451,546	477,505	25,959
Professional Development	269,145	453,015	183,870
Group Home	0	360,000	360,000
Technology	274,992	264,219	(10,773)
Language Assistance	10,545	119,163	108,618
Vocational Equity	0	112,000	112,000
Full Day Kindergarten	0	39,000	39,000
Charter School - Indirect	0	7,323	7,323
Targeted Fund	0	0	0
Subtotal - Unrestricted	*$30,817,788*	*$35,894,621*	*$5,076,833*
Professional Development	$0	$453,015	$453,015
Student Equity	0	163,760	163,760
Targeted	0	0	0
Subtotal - Restricted	*$0*	*$616,775*	*$616,775*
Total School Aid	**$30,817,788**	**$36,511,396**	**$5,693,608**
Percent Unrestricted	100.0%	98.3%	89.2%
Percent Restricted	0.0%	1.7%	10.8%

Source: RIPEC calculations based on RIDE Data

First it should be noted that the State has not had a true school funding formula system since FY 1995. Therefore, much of the funding is based on prior year allocations which are not annually updated by the General Assembly. In other words, both the equities and inequities of past allocations remain frozen in the system. The state essentially guarantees school aid for each school district at the same level received the prior year.

A number of school aid programs have been folded into others, while others have been created to target resources to certain school districts. The General Assembly took an active approach to targeting the majority of funding to urban school systems, primarily to assist in financing school systems with limited fiscal capacity and high student need.

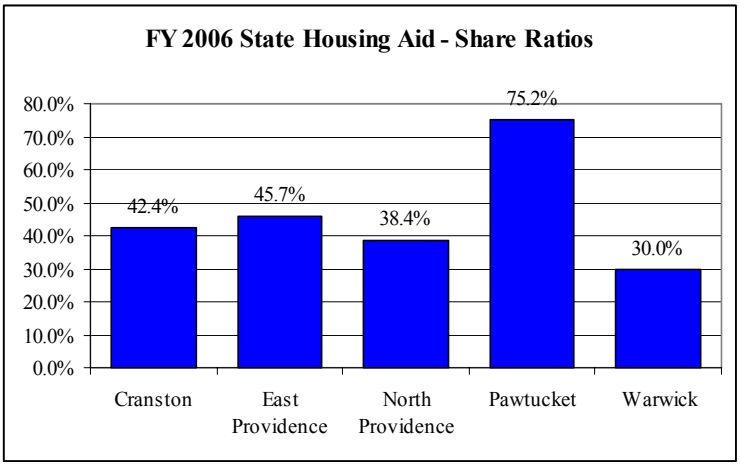
While Warwick has experienced modest growth in its overall school aid, it has not kept pace with the State as a whole. Its share of Statewide school aid has declined from 6.0 percent in FY 2000 to 5.5 percent in FY 2006. This is in part due to its relative wealth and its relatively small share of students with economic and language needs. The areas where the City fares best are in professional development funding and early childhood education funding. The City appears to gain a larger share of these resources as they are allocated through these formulas – professional development due to the number of teachers in the Warwick school system and early education due to the size of the school system's overall enrollment. Among the peer communities, only Pawtucket gained in its share of total school aid, increasing from 9.1 percent to 9.7 percent during this period.

The two areas where the City gained the most in net new school aid dollars were in general aid and in the Student Equity Fund. Warwick benefits under these two funds primarily due to its overall size of its enrollment. Combined, the City gained $4.2 million of its $5.7 million increase – nearly 75 percent of its State education aid growth since FY 2000. This is generally true for most communities, including those among the peer communities.

However, there are a number of exceptions to note. First, Pawtucket, defined as an urban core community has seen the greatest growth from FY 2000 to FY 2006 – increasing by 38.1 percent during this period. This translates into an average annual rate of growth of 5.5 percent - outpacing the peer communities and the State (4.4 percent growth). Pawtucket received nearly 12.0 percent of the net increase in school aid statewide during this period, and nearly half of the total increase among the peer communities. In addition, Pawtucket is the only peer community that receives funding under the Targeted Aid program, where it receives an additional $4.0 million in aid in FY 2006 – only four communities share in the $20.0 million allocated through this program in FY 2006 – Pawtucket, Providence, West Warwick and Woonsocket. This funding is designed to drive funding to those school districts with the greatest student need and the most limited fiscal capacity.

A quick note on restricted aid - generally, 1.5 percent of the total education aid distributed to school districts throughout the State is considered restricted in that the funding has to be used for approved purposes. Nearly 1.7 percent of the City of Warwick's general education aid program falls into this restricted category. While 6.5 percent ($10.0 million) of the Statewide growth in school aid ($152.9 million) was for additional restricted funding, the increase in aid to Warwick has begun to shift towards more restrictive funding, with nearly 11.0 percent of its increase allocated towards restricted funding – primarily professional development.

State Housing Aid – The State partially reimburses local school construction projects that are approved by the State's Board of Regents. The reimbursement rate is based on a school district's wealth compared to the State's wealth. Each community is guaranteed at least a 30.0 percent reimbursement rate. Reimbursement is based on the total cost of the project, not of the original bond issuance. A major adjustment to the program was made in FY 1998. Up until FY 1998, the program only supported projects funded though general obligation bonds. The program now permits projects that use lease revenue bonds, capital leasing arrangements and capital reserve funds. Among the peer communities, Warwick is the only minimum reimbursement community. Pawtucket has the highest rate of reimbursement (share ratio) of 75.2 percent.



The State distributed $25.5 million in housing aid in FY 2000 – this has since increased to $45.7 million in FY 2006, representing a 78.8 percent increase during this period. This translates into an average annual rate of growth of 10.2 percent during this period. Housing Aid represents 4.8 percent of the State's total aid package to local governments.

State School Housing Aid

Communtiy	2000	2006	Change	Percent Change	Ave-annual Change
Cranston	$0.9	$2.0	$1.0	108.1%	13.0%
East Providence	0.4	1.0	0.6	152.4%	16.7%
North Providence	0.7	1.3	0.6	93.3%	11.6%
Pawtucket	0.9	1.6	0.6	70.5%	9.3%
Warwick	0.9	1.4	0.5	55.0%	7.6%
Peer Total	*$3.8*	*$7.2*	*$3.4*	*88.9%*	*11.2%*
State	**$25.5**	**$45.7**	**$20.1**	**78.8%**	**10.2%**

Source: RIPEC calculations based on House Fiscal Staff Data

The housing aid for the peer communities as a group experienced an 88.9 percent increase during this period, slightly outpacing the state as a whole. Only Warwick and Pawtucket experienced growth rates slower than the State average. Warwick's aid for

this program increased from $0.9 million in FY 2000 to $1.4 million in FY 2006, representing an increase of 55.0 percent, or an average annual rate of growth of 7.6 percent. The City's share of the total program has declined from 3.5 percent in FY 2000 to 3.0 percent in FY 2006. The $1.4 million in aid under this program represents 2.4 percent of the city's total aid package.

4. Student Performance Trends

SAT Performance

- Warwick's combined SAT scores increased by 5 points, from 1,000 in 2001 to 1,005 in 2005, attributable to a five-point increase in the math section of the test;
- When compared to its peers, Warwick's combined score of 1,005 in 2005 ranked the district second highest after Cranston (1,019 points) and 9 points higher than the State average. Pawtucket had the lowest score among the surveyed districts (915) in 2005;
- In the math section, Warwick's performance increased by 5 points from 503 in 2001 to 508 point in 2005. This performance ranked the district second highest among its peers. Cranston ranked highest in the math section, reaching 514 points in 2005 and East Providence was lowest (463 points). Only Cranston and Warwick experienced a score above the State average of 501 points in 2005;
- In the verbal section, Warwick's performance of 497 points in 2005 ranked the district second highest. Cranston ranked highest among the peers with a score of 505 points in 2005, while the lowest score was in Pawtucket (451 points). When compared to the State average of 495 points, only Cranston and Warwick were above the State average.

New Standards Reference Exam (NSRE) Performance
Fourth Grade Mathematics

- All five surveyed districts improved their score in all categories of mathematics between 2001 and 2004;
- In the skills section, Warwick improved the percentage of 4th graders meeting or exceeding the standard by 15.0 percentage points, from 66.0 percent in 2001 to 81.0 percent in 2004. This performance ranked Warwick first among its peers, followed by Cranston with 79.0 percent;
- In math concepts, Warwick had the second highest percentage increase in performance among the peer districts. The district increased its score by 23.0 percentage points, from 36.0 percent of its students proficient in 2001 to 59.0 percent in 2004;
- In mathematical problem solving, Warwick more than doubled the percent of students being proficient, from 22.0 percent in 2001 to 50.0 percent of its 4th graders being proficient in 2004, ranking the district highest among its peers, together with Cranston.

Fourth Grade Reading

- In basic understanding, Warwick increased its performance by 5.0 percentage points, from 76.0 percent in 2001 to 81.0 percent being proficient in 2004. This ranked the district second highest after Cranston in 2004;
- In analysis and interpretation, Warwick ranked second highest among its peers in 2004, with 73.0 percent of 4th graders being proficient. Cranston's 4th graders ranked highest with 75.0 percent reaching proficiency in 2004.

The following tables show student performance in the five districts on the Scholastic Assessment Test (SAT) for 2001 and 2005 and the New Standards Reference Exam (NSRE) for the years 2001 and 2004 for grade 4.

SAT Performance

The Scholastic Assessment Test (SAT) is a voluntary college entrance exam primarily taken by high school juniors and seniors. SAT results are used by universities and colleges in making decisions about individual students. Each section's maximum score is 800 points.

Scholastic Assessment Test (SAT) Scores

	Math Section			Verbal Section			Combined SAT Scores		
	2001	2005	Change 2001-05	2001	2005	Change 2001-05	2001	2005	Change 2001-05
Cranston	512	514	2	500	505	5	1,012	1,019	7
East Providence	455	463	8	458	455	(3)	913	918	5
North Providence	475	472	(3)	472	477	5	947	949	2
Pawtucket	456	464	8	447	451	4	903	915	12
Warwick	503	508	5	497	497	0	1,000	1,005	5
State	492	501	9	490	495	5	982	996	14

Source: RI Dept. of Education InfoWorks, and RIPEC calculations.

Warwick's combined SAT scores increased by 5 points, from 1,000 in 2001 to 1,005 in 2005. This increased performance is attributable to a five-point increase in the math section of the test, which increased from 503 points in 2001 to 508 points in 2005. The performance in the verbal part was 497 points, the same performance than in 2001.

Combined SAT scores increased in all surveyed districts between 2001 and 2005. All five districts experienced a lower increase than the State average increase of 14 points during that time, ranging from an increase of 2 points (North Providence) to 12 points (Pawtucket). In 2005, two districts (Cranston and Warwick) had a higher combined score than the State average, while East Providence, North Providence and Pawtucket were below the State average of 996 points.

When compared to its peers, Warwick's combined score of 1,005 in 2005 ranked the district second highest after Cranston (1,019 points) and 9 points higher than the State average. Even with the increase of 12 points between 2001 and 2005, Pawtucket had the lowest score among the surveyed districts (915) in 2005.

In the math section, Warwick's performance increased by 5 points from 503 in 2001 to 508 in 2005. This performance ranked the district second highest among its peers, after Cranston which had 514 point in 2005. The lowest math performance in 2005 was in East Providence (463 points). Only Cranston and Warwick experienced a score above the State average of 501 points.

In the verbal section, Warwick's performance of 497 points in 2005 ranked the district second highest. As with the math section, Cranston ranked highest among the peers with a score of 505 points in 2005. The lowest score was in Pawtucket (451 points). When compared to the State average of 495 points, only Cranston and Warwick were above the State average.

NSRE Performance

Rhode Island measures district performance by using the New Standards Reference Exam (NSRE). However, Rhode Island will be part of the New England Common Assessment Program, a collaboration with Vermont and New Hampshire. The three states will work together in developing a new set of assessments. In the 2004-2005 school year, as Rhode Island went through a transition to a new testing system, State assessments were administered in only high schools and in schools whose highest grade is Kindergarten or Grade 1. Elementary schools and middle schools were not tested in the spring of 2005.

The NSRE is a performance assessment, as opposed to a traditional multiple-choice test. These tests were given to students in grades 4, 8, and 10 in mathematics, reading, and writing. Each New Standards test consisted of either two or three sub-tests.

The tests were not graded on a scale, such as 1 to 100. Rather, for every subject and in every grade level, there are "standards" that have been adopted by the Rhode Island Board of Regents for Elementary and Secondary Education. These standards describe the quality of work expected at each grade level. The number shown for each test represents the percentage of students in that grade level that have met or exceeded the state standard.

Fourth Grade Mathematics

For the mathematics assessment, the exam covers three areas. One score measures how well each student knows mathematical skills, a second area of the test measures the student's understanding of mathematical concepts, and a third score indicates how well the student solves math problems. The complexity of the math increases as one moves from basic skills to problem solving. The table below shows the percentage of students who met or exceeded the state performance standard in these areas in 2001 and 2004, the most recent year for which district data for fourth-graders were available.

All five surveyed districts improved their score in all categories of mathematics between 2001 and 2004. However, a significant percentage of students still do not meet the standards in more complex areas (subgroups concepts and problem solving). In the skills section, Warwick improved the percentage of 4th graders meeting or exceeding the standard by 15.0 percentage points, from 66.0 percent in 2001 to 81.0 percent in 2004. This put Warwick first among its peers with 81.0 percent of its 4th graders meeting proficiency levels in 2004. Cranston ranked second with 79.0 percent of its 4th graders being proficient in 2004. Even though Pawtucket's 4th grade students increased their proficiency levels by 20.0 percentage points between 2001 and 2004 – the highest increase among the peer districts - the district still ranked last with 61.0 percent of 4th graders meeting or exceeding proficiency in 2004.

New Standards Reference Exam (NSRE) Mathematics, Grade 4
Percent of Students Meeting or Exceeding the State-Performance Standard

	Skills			Concepts			Problem Solving		
	2001	2004	Change 2001-04	2001	2004	Change 2001-04	2001	2004	Change 2001-04
Cranston	64	79	15	37	61	24	27	55	28
East Providence	66	74	8	44	48	4	28	40	12
North Providence	59	76	17	29	41	12	14	32	18
Pawtucket	41	61	20	16	31	15	9	25	16
Warwick	66	81	15	36	59	23	22	50	28

Indicates the percent of all students who met or exceeded the standard (including LEP Level I and those eligible for Alternate Assessment)
Source: RI Dept. of Education InfoWorks, and RIPEC calculations.

In math concepts, Warwick had the second highest percentage increase in performance among the peer districts. The district increased its score by 23.0 percentage points, from 36.0 percent of its students proficient in 2001 to 59.0 percent in 2004. Among its peers, Warwick was only outperformed by Cranston, which increased its proficiency levels by 24.0 percentage points. Cranston's performance in 2004 was highest when compared to the peer districts with 61.0 percent of its 4th graders meeting or exceeding proficiency, followed by Warwick with 59.0 percent. Pawtucket almost doubled the percent of students proficient in math concepts during that time period. However, as with basic math skills, Pawtucket's proficiency levels were the lowest among its peers with 31.0 percent of its students reaching proficiency in 2004.

In mathematical problem solving, Warwick more than doubled the percent of students being proficient between 2001 and 2004. In 2001, 22.0 percent of its 4th graders were at proficiency levels. This has increased by 28.0 percentage points to 50.0 percent in 2004. Together with Cranston, this was the highest percentage increase among its peers. Warwick ranked second highest, only outperformed by Cranston where 55.0 percent of students reached proficiency. The lowest level of proficiency was in Pawtucket. This district had 25.0 percent of its students being proficient in problem solving in 2004. While all surveyed districts increased their proficiency levels one should note that a significant percentage of students still do not meet the standards. In 2004, between 75.0 percent of 4th graders (Pawtucket) and 45.0 percent (Cranston) were below proficiency levels.

Fourth Grade Reading

The NSRE reading assessment covers two areas. One score measures the student's basic understanding skills, the other the student's skills in analysis and interpretation. The 2004 reading performance in all surveyed districts showed an increase in the percentage of students meeting proficiency in both subgroups when compared to the 2001 results.

In basic understanding, Warwick increased its performance by 5.0 percentage points between 2001 and 2004. In 2004, 81.0 percent of all 4th graders met the proficiency level in basic understanding, up from 76.0 percent in 2001. Among the peer districts, the increase in performance during that time ranged from 2.0 percentage points in East

Providence to 8.0 percentage points in Cranston and Pawtucket. In 2004, Cranston reached the highest proficiency levels with 85.0 percent of all 4th graders reaching proficiency in basic understanding, followed by Warwick with 81.0 percent. Pawtucket reached the lowest level with 66.0 percent of its 4th graders being proficient in 2004.

New Standards Reference Exam (NSRE) Reading, Grade 4
Percent of Students Meeting or Exceeding the State-Performance Standard

	Basic Understanding			Analysis & Interpretation		
	2001	2004	Change 2001-04	2001	2004	Change 2001-04
Cranston	77	85	8	68	75	7
East Providence	74	76	2	60	63	3
North Providence	75	79	4	63	65	2
Pawtucket	58	66	8	39	52	13
Warwick	76	81	5	61	73	12

Indicates the percent of all students who met or exceeded the standard (including LEP Level I and those eligible for Alternate Assessment)

Source: RI Dept. of Education InfoWorks, and RIPEC calculations.

Fourth grade performance in analysis and interpretation improved by 12.0 percentage points in Warwick, from 61.0 percent meeting or exceeding proficiency levels in 2001 to 73.0 percent in 2004. This was the second highest increase in proficiency among the peer districts. Only Pawtucket had a higher increase, increasing its proficiency by 13.0 percentage points, from 39.0 percent of its 4th graders being proficient in 2001 to 52.0 percent in 2004. However, even with that increase, Pawtucket still has the lowest proficiency levels among its peers. In 2004, 52.0 percent of its 4th grade students were proficient in analysis and interpretation. Cranston had the highest level of 4th graders being proficient (75.0 percent), followed by Warwick with 73.0 percent being proficient in 2004.

VI. Information Technology Evaluation

As with most School Districts, plans for technology within Warwick Public Schools have been based upon the educational technology needs of each School within the district. With the new mandates from Federal and State governments, the district has had to develop new plans for technology to support the demands for data and assessment. The Warwick Public Schools is striving to provide the school district with the tools necessary to deliver the highest level of instruction to their students to prepare them for the workplace, and at the same time, gather the data required by the Federal and State Government for assessment needs. In order for students to be properly prepared to compete in an ever-increasing technological world, all students must possess adequate knowledge, skills and competencies. The School District must provide Educators with the tools needed to integrate technology into the curriculum to improve student achievement, and at the same time, implement an infrastructure to support the new mandates and requirements from the government.

With the No Child Left Behind Act (NCLB), Education needs to focus on high standards, accountability, and school improvement. By 2008, the Rhode Island Regents' Regulations mandates that all students will be required to demonstrate proficiency of required knowledge and skills in six core areas (ELA, Math, Science, Social Studies, Arts and Technology) to graduate. Each district is required to establish proficiency-based graduation requirements for all students beginning with the 2008 graduating class.

The school-wide diploma assessments, Graduation Portfolio and Exhibitions, are components of the new High School Diploma System. Graduation Portfolios require students to collect and select evidence that represents work completed to high levels of performance over their high school education. Additionally, the Graduation Portfolio requires students to demonstrate proficiency as measured against GSEs and other state and national standards. Students are also required to include formative reflections for individual entries and summative reflections for the collection of entries in their Graduation Portfolio. In addition, students must participate in a formal presentation of their Graduation Portfolio. The second requirement, Exhibitions, will be met by Senior projects. Senior projects incorporate research, public speaking, community involvement, and a physical project creation. The intent is that the project will reflect the skills and knowledge the student has developed over the past 12 years. As a result, these two requirements rely on technology and the district needs to implement a foundation to support and provide the necessary tools for the students to obtain their proficiency to graduate.

Another key requirement that the School District needs to address is the implementation of Personal Literacy Plans (PLP). As of 2005-2006 all students not reading to their level are required to have a PLP. A PLP is a plan of action for a teacher to use to bring a student to reading proficiency. Districts are required to track and assess a student's PLP process. As a result, Warwick School Department has embarked on implementing an automated module that interfaces with the Student Management System for teachers to update, track, and assess student performance.

With these challenges, the district must develop a plan to meet all requirements and provide the tools necessary to support the students' goals to be successful. The district does have a Technology Plan developed, titled "Focus 2008 Technology Supporting Proficiency." It focuses on the critical requirements the district needs to address around High School Graduation Proficiency, Personal Literacy Plans, and High School Accreditation.

The Warwick School Department is making strides towards meeting the goals of "Focus 2008." The district has begun a project to implement Digital Portfolios starting with the graduating class of 2008. The School Department has also automated the PLP process by adding an online module in the Student Information Management System, called "Star_Portal," for teacher access and updating.

As part of the evaluation of the Information Systems, funding resources used for technology, policies and procedures supporting technology, hardware and software, staffing, and support were reviewed. This document outlines recommendations for improvement and includes an environmental scan of the Information Systems implemented in the district.

Budget

Funding for technology in the Warwick School Department comes from a variety of resources, including grants, the District Technology operating budget, Title IID funds and Erate funding from the Federal Government. The district applies for grants to off-set the cost of several initiatives. As detailed later in the Environmental Scan, the district has several projects in process that were initially funded by grants, such as Emergency Calling, Laptop carts at Gorton, the Digital Portfolio project, and others.

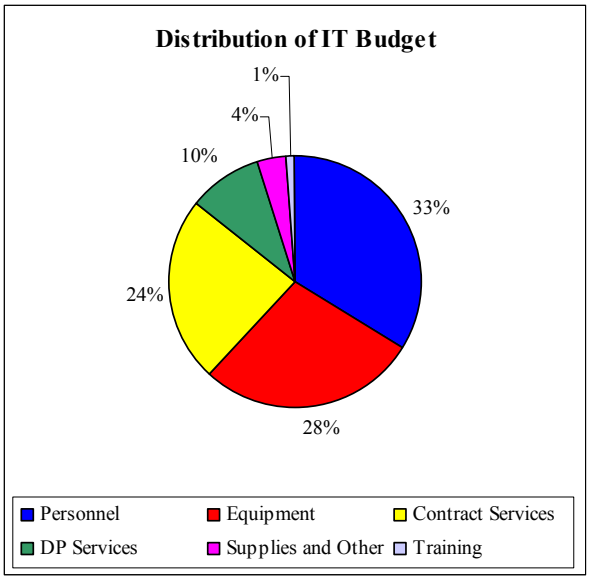
The yearly technology operating budget, funded through the local budget, approximately $1.9 million, is the main resource for funding technology for the schools. The operating budget is outlined below.

Estimated IT Budget - FY 2006

Expenditure	Amount	Share
Personnel	$646,209	33.9%
Equipment	532,840	27.9%
Contract Services	452,600	23.7%
DP Services	184,500	9.7%
Supplies and Other	71,470	3.7%
Training	20,600	1.1%
Total IT Budget	$1,908,219	

Source: Based on School District Data

As illustrated in the pie chart, one-third of the operating budget is for personnel costs of the IT Department, and one-third of the operating budget is used for new equipment purchases such as Servers, Switches, and some computers. Twenty-five percent of the budget is used for Maintenance contracts to support the district, as detailed in the Environmental Scan later in the document. Please note that this does not reflect additional technology purchases made by the individual schools. Each school has an equipment budget that is utilized for computer and peripheral purchases.



Another area of funding that the district has taken advantage of is the reimbursements for telecommunications services through the Erate program offered by the FCC School and Libraries Division. Based upon free and reduced lunch counts, a district may apply for reimbursements for monies spent on telecommunications, Internet Access, and Internal Connections. Last funding year, July 1, 2004 through June 30, 2005, the district was awarded a $75,000 reimbursement against the cost of the telecommunications costs. Application is a yearly process and there is no guarantee that a district will be funded. The School District has been fortunate to receive reimbursements in the past five years out of eight years the program has been in place, for a total of approximately $375,000 in Erate funding to date for Telecommunications Services only.

Staffing

With the need and use for technology in a district, many different people are involved. Technology in education is used by Administration, Teachers, Students, and Staff. Each group has their own requirements and, therefore, uses technology in different ways.

The IT Staff of the Warwick School Department is tasked with the maintenance and support of the technology in place, as well as ensuring that future technology needs are met. The IT Staff that supports the Information Technology Systems in the district consists of the Manager of Information Systems, the Assistant Information Services Manager, (5) Technicians, (1) Systems Analyst and (3) Data Specialists.

The world has become technologically dependent. As a result, education needs to provide the tools necessary for teachers to instruct and students to learn. The IT Staff is in a position to provide them and support them, but the question arises, “Are these tools being used as they were intended? If not, why?”

The following highlights and recommendations are based on the findings developed in the Environment Scan. There are some areas where further efficiencies may exist, but overall, with the initiatives in place and the requirements for High School Graduation Proficiency, reporting and assessment, and provision of the tools needed for the students to learn, funding is limited and may not be sufficient for the district to reach its goals:

1. *Evaluate the potential for establishing a unified IT function with the City and the School Department.*
   There are several areas of consolidation that may improve efficiency for a City and School Department the size of Warwick. The City and the School Department should consider combining resources and evaluate what areas could be consolidated and what the return on investment would be. With similar initiatives planned by both entities, a unified plan may drive down costs and provide the City and School Department with a more efficient, cost-effective and robust IT infrastructure that neither entity could afford individually.

   The City and the School Department may increase productivity and efficiency by integrating resources. Although the technology usage is different for each entity, there are fundamental technologies that are similar, such as networking, Server Operating System support, and Desktop support. By integrating some of the tasks of the teams, the City and the School Department may utilize additional resources to increase support time and may reduce out-source maintenance contracts.

   As noted in the report, there are several areas where consolidation of resources, services, and projects may improve efficiency and reduce the overall costs to the City and School Department. The next step in the process should be to jointly (City and School Department) contract with an outside firm to conduct a detailed analysis of the Information Technology Systems at both the City and the School Department to evaluate, at a minimum, all hardware and applications in use, staffing, support procedures and contracts, and future initiatives. A detailed unified plan should be assembled and become a blue print for future purchasing and planning.

2. *Explore the feasibility of moving toward a unified Financial Management Information System (FMIS) for the City and the School Department.*
   The City and the School Department may save costs by centralizing some services and streamlining some of the processes in place. The School Department is supporting Pentamation for a financial application and the City is utilizing MUNIS. The School District is paying upwards of $56,000 for upgrades and maintenance of the current system. The City is paying similar costs for the upgrades and maintenance to their Financial Application. There is data that needs to be transferred between the School Department and the City, but because of disparate systems, data entry from the School Department is a manual process into MUNIS. Not only is the overall City-wide budget paying approximately $75,000-$100,000 to maintain two financial systems, but the process to transfer data from one to another is costing the City money in additional staffing. The

School Department's Administration is planning to replace the financial system (Pentamation), in approximately 24 months. Evaluation of products will be performed over the course of the next 12 months and purchase and implementation will take place the year after. This would be the opportunity for the two entities to explore the feasibility and return on investment by moving toward a unified system.

3. *Explore the feasibility of consolidating licensing purchases with the School Department and the City to minimize costs.*
   Since the City and the School Department operate many of the same licenses, such as Microsoft Windows Client Licenses, Microsoft Office Licenses, and Anti-Virus licenses, the option to consolidate licensing contracts should be explored.

4. *Explore the feasibility of integrating the Wide-Area Network and IP Telephony initiatives.*
   The City and School Department can save money long-term by combining the two WAN networks. It is understood that a plan was in place to run fiber-optic cabling throughout the City to interconnect all buildings with a fast pipe. If the City interconnects to the School Administration Building, services could be centralized and efficiencies could be realized. First, the City would be able to take advantage of the Disaster Recovery solution the School District has in place and leverage each other's services.

   Also, the cost of Internet Access may be reduced by consolidating. Another area is an initiative that both the City and the school department have explored - upgrading the existing voice system to IP Telephony. By implementing IP Telephony city-wide, all entities may reduce the overall recurring costs of telecommunications by leveraging each others resources. The total number of Telco lines would be reduced, the number of PBX systems would be reduced, and overall maintenance should decrease.

5. *The School Department should make immediate accommodations for students to access computer resources outside of assigned times within the school day.*
   During this evaluation, it became apparent that the tools that the City and School Department have invested in are not being used to their potential. For example, the district has invested in many computer labs district-wide for the students and teachers to use for research and curriculum development.

   According to Warwick School Department personnel, there are staffing issues that result in students being unable to use the Computer Labs to work on their projects or papers except on scheduled days for their class. For example, if a student needs to do research on a project for his/her History class, the student can only use the Lab during the time that the History class is scheduled for usage of the Lab. The district is being challenged with the requirements for High School Proficiency, but the students cannot use the tools already in place after class or at the end of the day because there is no one to staff the Labs.

6. *The School Department should provide a status report by October 1, 2006 on the issues and recommendations detailed in this document to the City.*
   The School Department should report to the School Committee and the City Council the status of the issues and recommendations for future planning and funding purposes to aid the School Department in achieving their required goals.

Policies and Procedures:
To maintain an effective Information Technology System, many policies and procedures need to be in place to provide for efficiency, cost-effectiveness, and accessibility. Without them, the system may become inefficient and potentially chaotic. With a district the size of Warwick, it is important to institute and maintain policies and procedures to provide a technology environment that effectively supports its teachers, students, and staff, as well as, the tax payers. Warwick School Department does have a series of policies and procedures in place. The policies and procedures are posted on the website, www.warwickschools.org, and are referenced in the Technology Plan. The policies and procedures in place include:

- *Telecommunications Policy:* outlines rights of students and teachers to access computing resources in the Warwick School Department and their individual responsibilities as users.
- *Acceptable Use Policy for Internet Access:* outlines the rules for user access of the Internet
- *Network Guidelines:* includes policies and procedures around hardware and peripheral usage, software installation, donations, policy for email, web page development procedures and overview of content filtering.

There are opportunities to enhance some of the School District's policies to ensure the system can operate in an effective and safe manner:

1. *Strengthen and maintain inventory reporting and documentation to ensure accurate records. A comprehensive inventory should be in place by October 1, 2006.*
   The district should strengthen its policy and procedure on maintaining up-to-date documentation and inventory of all IT assets. Although the Warwick School Department does have some documentation of the system, it is not complete and needs to be updated and maintained. Given the fluid nature of technology, it is necessary to maintain an inventory for depreciation purposes alone. It is important for planning and asset recording purposes that this documentation is available and accurate. It is difficult to know what is needed to support students and teachers if one does not know what is currently available.

   The School Department should evaluate the tools used by the City for inventory management and determine the feasibility of incorporating the School Department's inventory with the City to take advantage of existing technology and management practices. Therefore, a complete inventory of all servers, desktops, laptops, switches, routers, printers, and peripherals, including

configuration, serial number, location, and any contract needs to be developed by October 1, 2006.

2. *Develop and maintain a tracking system by October 1, 2006 for management and support of all technology in the district.*
   Once the product or service is procured, a process needs to be put into place to access the IT personnel for technology assistance. Presently, the procedure is based on a work order process through Exchange. If a teacher or staff member needs a technician, a request is submitted via Email. The requests are assigned to a technician. Once the Technician completes the request, a report is sent to the Manager of Information Systems to review.

   Presently, there is no tracking system in place to track the length of time it takes to close out a request, how many times the same request has been made, or if a computer has suffered from the same problem a multiple number of times. The district should consider investing in a tracking system that will make the process more efficient. A tracking system would show how long it takes to respond and resolve an issue. It would track issues by type, so the district could quickly determine if there is a hardware/software problem or if more training is needed. The School Department should evaluate the tools used by the City for tracking support requests to take advantage of existing technology and management practices.

   Also, the system would be able to track whether multiple systems are having similar problems which may indicate that the manufacturer may need to get involved because it is a bigger problem than originally thought. This is a key management tool that the district should invest in to increase efficiency.

3. *Update the district's Technology Plan with new initiatives and a district-wide plan including educational technology.*
   A district Technology Plan becomes the key document for planning purposes for initiatives and projects. The plan should include all uses for technology, projects, project timelines, and sources of funding. Several different entities, including State and Federal Government, look to the document for information regarding the plans for technology within a district. The Technology Plan should be continuously updated with the new initiatives of the district, plans for Internal Connections as it relates to the Erate program offered by the FCC School and Libraries Division, and incorporate a district-wide plan for technology, as it relates to all academic needs of the district for proper planning and funding.

4. *Develop and continuously update a yearly all funds technology budget.*
   In order to properly plan for technology, funding resources are needed. The district should develop an all fund Technology budget that incorporates all funding resources utilized and available to the district. Also, any movement of money from one account to another must be documented.

5. *Evaluate the status of access to technology in each school to determine the degree of uniformity among the different school levels.*
   The equity of technology in the schools requires attention. Currently, the Administrators at each school, with recommendations and requests from teachers, request the technology for their buildings. Technology usage in each school is different. There does not appear to be an equitable distribution of technology among the schools. The Technology Plan calls for one computer for every three students. Clearly, based upon the table, the School District has not reached its goal. The district needs to incorporate into the Technology Plan, a deployment and funding strategy to reach its goal and keep it updated.

   The Elementary Schools do appear to be more standardized than the High Schools and Junior High Schools. Assuming a district-wide curriculum plan is in place, technology and how it is applied would be similar among the High Schools and Junior High Schools. For example, Warwick Vets and Pilgrim High Schools have more computers per pupil and Computer Labs than Toll Gate High School. As a result, some students in the district are not exposed to and do not benefit from the same technology tools as other students in the district. The question arises as to whether that effects the overall learning experience of each pupil. Hopefully, with the new Technology Application Assessment Coordinator on staff, there may be some guidance and uniformity with technology tools throughout the district.

   The average number of computers in an Elementary School is 65 with a computer-to-student ratio of 1:4.53. The average number of computers in the Junior High level is 124 with a computer-to-student ratio of 1:5.25. The High School level averages 324 computers with a computer-to-student ratio of 1:3.98.

6. *Ensure product and services procurement continues to adhere to current bid law.*
   To begin with, as with all public entities, it is a requirement for the district to adhere to current bid law. Procurements for technology must follow a defined process. Any requests over $2,500, but less than $5,000, must be accompanied by three current quotes and requires approval from the Superintendent. Any requests over $5,000, but less than $10,000, also require three current quotes and need to be approved by the School Committee. Anything over $10,000 must be put to bid and follow bid law. The district does leverage State Contracts wherever possible to minimize the cost of the bidding process. It is imperative that the district continue to follow the procurement process and bid law for all purchases.

Warwick School Department
Student-Computer Ratios

School	Personal Computers	Student Enrollment	Student - Computer Ratio (1)	Percent of Peer (2)
Elementary Schools				
Cedar Hill	104	394	3.79	83.7%
Drumrock	49	318	6.49	143.3%
Francis	60	263	4.38	96.8%
Greene	57	259	4.54	100.4%
Greenwood	65	301	4.63	102.3%
Holden	51	270	5.29	116.9%
Holliman	66	321	4.86	107.4%
Hoxsie	51	351	6.88	152.0%
Lippitt	81	312	3.85	85.1%
Norwood	64	226	3.53	78.0%
Oakland Beach	85	408	4.80	106.0%
Park	65	234	3.60	79.5%
Potowomut	49	156	3.18	70.3%
Rhodes	77	306	3.97	87.8%
Robertson	62	239	3.85	85.1%
Scott	63	271	4.30	95.0%
Sherman	82	367	4.48	98.8%
Warwick Neck	71	288	4.06	89.6%
Wickes	56	315	5.63	124.2%
Wyman	42	287	6.83	150.9%
Sub total	*1,300*	*5,886*	*4.53*	
Junior High Schools				
Aldrich	150	656	4.37	83.3%
Gorton	118	634	5.37	102.3%
Winman	104	664	6.38	121.5%
Sub total	*372*	*1,954*	*5.25*	
High Schools				
Pilgrim	367	1,385	3.77	94.8%
Toll Gate	243	1,236	5.09	127.8%
Veterans	362	1,249	3.45	86.7%
Sub total	*972*	*3,870*	*3.98*	
Total School	**2,644**	**11,710**	**4.43**	
Other				
Admin	203			
Career Center	153			
Sub total	356			
Total	**3,000**			

Notes:

(1) - Students divided by computers

(2) - School Ratio divided by ratio of its schools within the same category (elementary schools, junior high schools, or high schools.

Source: RIPEC Calculations based on Warwick School Department Data (2005)

Hardware and Software:
Requirements for Technology for a school district are significant and can be costly. Designing solutions to support present needs and future requirements for a district with multiple objectives is difficult. With the mandates for accountability from the Federal Government and the necessity for student learning, districts need to find creative ways to implement technology solutions for both needs within the constraints of a limited budget. The Warwick School Department is implementing several technology initiatives that will be beneficial to the long-term requirements of the district:

1. *Complete the Disaster Recovery Plan by August 31, 2007.*
   To begin with, the district is ahead of many others with plans for Disaster Recovery. As detailed later in the Environmental Scan of this document, the district has implemented an EMC Clariion CX300 for Disaster Recovery. This project is divided into 2 phases. Phase 1 of this project, which required approximately $152,000 and is complete, was to configure backup to disk of all the Servers in the Computer Center. It uses Legato Replistor for replication of data to disk. Data is replicated every 30 minutes. Phase 2 of the project is to incorporate the remote servers from the schools in the district. The cost to complete this project is estimated at $22,700. Since the remote servers are currently not backed up, the district should continue with its plan and complete its project.

2. *Complete the WAN Upgrade by August 31, 2006.*
   Another initiative that the district is in the process of implementing is an upgrade to the Wide-Area Network. As noted, all schools are connected to a frame cloud via a T1 connection (1.54Mb). A frame cloud is a termination point of multiple frame relay telecommunication lines to a single point. From the frame cloud, Administration has a T3 connection, which is the equivalent of (24) T1 connections. With the growth of online resources, the need for Student Portfolios, accountability and reporting, access to centralized resources is increasing. As a result, the bandwidth between schools is saturated and needs to be increased.

   The Warwick School Department has been working with RINET and Verizon to increase the bandwidth from each school to 10Mb. This new design will provide more capacity for the schools and will support the need for centralized services. The district has already purchased new routers for all schools with the exception of six. The district will need to invest in the six new routers at the edge to support the faster bandwidth. This will cost approximately $30,000. The plan is to upgrade all locations in 2006. Funding is available in the 2006 budget. Plans for the WAN upgrade should be integrated into the Technology Plan to support the district-wide plan for technology.

3. *Begin the pilot of Online Grading by the 3rd Quarter of the 2006 School Year.*
   Currently, grading by teachers in the Warwick School Department is a manual process. Grades are documented and submitted to designated Staff in each school for online entry into Star Base. A group of teachers from Aldrich and Pilgrim will be entering data into the Grading module as a pilot during the 3rd quarter of the 2006 school year. Overall participation and acceptance from all of the teachers in the district is uncertain given the lack of a contract. If accepted, online grading will be phased in by department.

4. *Complete Digital Portfolio Action Plan by November 1, 2007.*
   As discussed in the Environmental Scan later in this document, the district has decided to implement a Digital Portfolio Solution as part of the State mandate for Graduation by Proficiency. The district was one of nineteen districts awarded a grant to fund licensing from the State. However, the grant does not include the necessary hardware. A server will be placed in each High School. The servers will be purchased out of Title IID grant monies. Presently, a fee of $5 per student for access to the system is projected per year. The final cost is not known at this time. In order to meet the 2008 deadline, the district will need to focus on developing and implementing the plan to reach its goal. The district is planning to leverage the SAN (EMC Storage Array Network used for Disaster Recovery) in place to store the data accumulated from the Digital Portfolios for the Senior Class of 2008. Since the long-term goal is to have Digital Portfolios for all students by 2011, the district needs to start planning for the necessary technology now to meet its goal. The district needs to determine what hardware needs to be placed at each school, such as new servers, the associated costs and how to integrate them into a district-wide Technology Plan.

5. *As part of a district-wide Technology Plan, develop a plan to provide all schools with new File Servers to store student data by November 1, 2007.*
   One of the needs in the district is to provide secure, networked file storage for all students to save their work, research, and projects. This need goes hand-in-hand with the Digital Portfolio requirements discussed above, but should not be delayed until 2011. Presently, the schools do not have adequate servers in each school to provide student data storage. As a result, the students need to save their work to a floppy or an external USB drive.

   There are several ramifications as a result of this process. First, the student data is not being backed up, so if a student loses their media, his/her work is gone. Second, it becomes easy for students to "share" work. There are no security measures in place to prevent this from happening. Storing student data on a central location is needed for several reasons, not only security. First, if the district is going to meet its goal to have Student Digital Portfolios in place, it is necessary for the district to start implementing a plan for this now.

It is understood that the EMC Storage Area Network that is used for Disaster Recovery, as detailed in the Environmental Scan, will be the centralized storage for student portfolios data, but the plan to implement student portfolios for all students is not goaled until 2011. The district should evaluate the requirements for protected student data and develop plans to address the needs now. Students need a place to store their work now. New servers with the appropriate amount of computing power, memory, and disk space to support the student directories for each school. It estimated that such an initiative could require up to $230,000.

6. *Implement Secondary Domain Controllers for each School by August 31, 2006.*
   The other requirement for new servers in the school is for local user authentication services access, and user profiles. As mentioned in the Environmental Scan Overview, the Domain Controllers in the Computer Center at the Administration Building provide authentication, DNS, and DHCP services. If there is a Wide-Area Network failure, PCs that have already obtained an IP Address via DHCP and updated DNS information will be able to continue to function, but will not have access to any applications served from the Computer Center. If a PC has not obtained an IP Address that day, then that computer will not have access to any network services at all.

   Also, students do not have individual profiles. For security and user identity needs, user profiles through Active Directory should be implemented. To achieve this, a Secondary Domain Controller needs to be put in each school to take over the basic services, in case of WAN failure. Some of the more powerful servers in the various schools may be retasked and used for this purpose. For the Elementary Schools, the servers do not need to be robust. The Middle Schools and the High school do require more robust servers as Secondary Domain Controllers and may need to be purchased. A complete inventory of the servers in the district, what services and applications they are supporting, and configuration needs to be completed to determine which servers may be retasked and which ones need to be purchased. This needs to be done district-wide and integrated into the Technology Plan. The Warwick School Department has confirmed funding is available in the FY2006 budget for this initiative.

7. *Evaluate the Microsoft School Agreement on a yearly basis to ensure it effectively meets the needs of the district.*
   According to the Technology Plan, the Warwick Public Schools has a 3-5 year PC-refresh. There are PCs in the district that are as old as 8 years. Since funds are limited and infrastructure upgrades are necessary, PC refresh becomes more of an obstacle, but is still necessary. The district does attempt to replace PCs when possible and should make this a priority.

In 2001, the Warwick Public Schools invested in a Microsoft School Agreement that provides support and upgrades for the following Microsoft products:

- Operating System
- Office Professional XP
- Visual Studio
- Encarta
- Client Access License for Microsoft Server

The Agreement covers approximately 3,000 licenses. With the plans for the new email system, the district should re-evaluate the cost of their Microsoft Agreement and verify if there is a cost savings with removing the 3,000 Exchange CALs that are no longer needed. The District should re-evaluate the benefits of the School Agreement and determine if it is cost-effective versus purchasing the client licenses outright.

8. *Determine the feasibility of implementing enhanced security at all School levels.*
Another area requiring attention is in the configuration of the networks and the security practices in place. Presently, for login access to the domain at all school levels, there are generic login accounts for student and teacher for all users. With this configuration there is no mechanism in place to determine which user is logged in or track what the person is accessing. With generic logins, students may access other student directories. To enhance login security, user accounts and profiles, through Active Directory, should be implemented at each school. This could be done using existing resources. The latest this should be implemented is with the deployment of Secondary Domain Controllers at each school.

   At the network level, the district should consider implementing VLANs (Virtual Local Area Networks) on the LANs in the Junior and High School levels. Presently, the networks in the schools are configured as one large LAN. By breaking up the networks at each school into VLANs, the school may see a performance increase, as well as, provide another level of security on the networks. This security enhancement, if feasible, should be implemented in conjunction with the WAN upgrade and IPT project.

9. *Assess the physical space available in the Computer Center at the Administration Building and determine options for expanding or moving the Data Center.*
The available space in the Computer Center is limited. As the District continues to grow and centralize services, more physical area will be needed. The District should evaluate its options to move the Data Center or expand into another room.

Short-Term Technology Initiatives:
The School District is planning for several projects over the course of the next 12 months:

1. *Once the new Email System is in place, terminate existing contracts associated with Microsoft Exchange and Post Office Mail.*
   The District has recently gone out to bid for a new Email and Communication solution to replace Exchange and Post Office. The district has decided to implement a new First Class Email solution starting in the Spring of 2006. As a result, the district should terminate any contracts in place to support Exchange and Post Office.

2. *Incorporate the plan for IP Telephony into the district-wide Technology Plan and evaluate the benefits of integrating the solution with the City for cost-effectiveness.*
   The district is currently developing a district-wide IP Telephony solution to replace the existing phone systems. Currently, the district has a contract with Verizon that ended in January and was renewed until January 2007. The district is working with Atrion to develop a design that will replace all analog phones with an IP Phone. The funding for the project, estimated at $411,000, was originally proposed in the 2006-2007 budget and has since been delayed to 2007-2008. This project will reduce the number of telephone lines needed throughout the district and replace antiquated systems. As the district plans for the WAN upgrade and purchases new switches for the schools, the district should be purchasing equipment that will support the plans for IP Telephony.

3. *Integrate the Emergency Calling Solution with the IP Telephony initiative for interoperability.*

   Another technology initiative the School District is working in conjunction with the City is to implement an Emergency Response Center. The City received a grant for $259,000 to implement a new system. There are six committees evaluating the requirements for the City Entities, Public Schools, and Non-Public Schools in the City of Warwick. The School District is working on the Communications committee to review the needs for communication with the parents in case of an emergency. As the district evaluates the different solutions available with the City, it should take into consideration the integration of the system with the new planned IP Telephony solution.

Information Technology Systems – Environmental Scan
Warwick Public Schools consists of three High Schools, three Junior High Schools, twenty-one Elementary Schools, and one Career Center. A walk-through of the schools, revealed that Technology varies by School. Historically, the administrators at each school, with recommendations and requests from teachers, would request the technology for their buildings. As a result, technology usage in each school is different.

Each School has a Local Area Network that supports 1-2 servers, computers in the classrooms, Computer Labs, and computers in the Library. Each School is connected to the Warwick Public Schools Administration Building via a frame connection.

The Computer Center in the Administration Building houses approximately 16-17 servers that support district applications. For security purposes, the district is broken into three domains, Warwick Schools (Academic), WPS (Administration), and PLP (Personal Literacy Plan). Each school is a child domain. For example, the main domain for the district is warwickschools.org so Tollgate is tollgate.warwickschools.org.

District-wide, the Warwick Public Schools has approximately 3,000 computers, ranging from current to 8 years old. The district purchases Dell computers, as budgets allow. The district is supporting Windows 95 to Windows XP Professional on the desktop.

Network Infrastructure:
From a network infrastructure perspective, all schools are designed and implemented similarly. The networks at each school are comprised of multiple telecommunications closets, interconnected with gigabit backbones. There is a mixture of network equipment including 3COM, Cisco Systems, and Enterasys. At a minimum, desktops have a 10/100 switched connection to the network.

The Warwick Public School Department currently maintains a Wide Area Network that connects all of the schools and administrative offices together. The Schools are interconnected presently via T1 lines into a Frame Cloud. A Frame Cloud is the point where the T1 Telecommunications Lines from each school come to a single point of termination. From the Frame Cloud, there is a T3 that connects to the Administration Building. RINET provides Internet Access to the School District via a 20MB connection from their facility to the Administration Building. The district is protected from the Internet, via a Cisco PIX 525 firewall. To manage bandwidth, the Warwick Public School Department has implemented a Packeteer PacketShaper. To control access to inappropriate Web sites and to adhere to the CIPA law, the district has integrated a Websense content filtering solution.

As noted each School is designed relatively the same, but technology varies. As part of the evaluation, several schools were assessed with more detail. These include the (3) High Schools, (3) Junior High Schools and (3) Elementary Schools, for sampling, as follows:

Pilgrim High School - Pilgrim High School's Local Area Network is comprised of approximately 367 networked computers distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services and Internet connectivity. Local Applications include Microsoft Office and is used primarily for word processing. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each English and Literacy department/classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 744 data drops and is distributed among six Telecommunication Closets. The Main Distribution Frame (MDF) supports approximately 336 drops. The MDF serves as the central wiring closet for the school and the demarcation point for telecommunication services for the Internet. This closet houses (7) 3COM SuperStack 4400 48-port 10/100 switches to support the end users terminating in this closet and (1) 3COMSuperStack 4900SX 6-port fiber switch used for backbone connectivity to remote closets. Also, a Cisco 2621 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud. All equipment is configured for Layer-2 Services, meaning that the network is not providing any additional security beyond what is implemented with Active Directory.

The first Intermediate Distribution Frame (IDF) supports approximately 96 ports. This closet houses (2) 3COM SuperStack 4400 Switches, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity.

The second Intermediate Distribution Frame (IDF) supports less than 24 active ports. This closet houses (1) 3COM SuperStack 4400 Switch, 24-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity. Also, this closet houses the Maxtor SAN Device for student data files and (3) Servers.

The third Intermediate Distribution Frame (IDF) supports 96 ports. This closet houses (2) 3COM SuperStack 3300 Switches, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity to the rest of the network.

The fourth Intermediate Distribution Frame (IDF) supports approximately 120 ports. This closet houses (3) 3COM SuperStack 4400 Switches, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity to the rest of the network.

The fifth Intermediate Distribution Frame (IDF) supports approximately 96 active ports. This closet houses (1) 3COM SuperStack 4400 Switch, 48-port 10/100 and (1) 3COM SuperStack 4400 24-port Switch for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity.

Finally, Pilgrim High School also supports (7) Computer Labs for academic use. The following Computer Labs are used for various subject instruction:

- Room 401: (26) Dell GX150 PCs (approximately 3 years old)
- Room 402: (28) Dell GX150 PCs
- Room 404: (28) Dell GX150 PCs
- Room 407: (28) Dell GX150 PCs
- Room 113: (19) Dell GX270 PCs
- Room 110: (20) Dell GX280 PCs for Computer Class
- Room 614: (28) Dell GX270 PCs (Need to sign-in for Lab use)

Other classrooms have a variety of PCs used for specific applications:

- Room 108: (6) PCs for Art Class (approximately 7 years old)
- Room 104: (4) Dell Dimension PCs for PhotoShop
- Room 704: (4) PCs mixed

The Library has (8) newer workstations in the Back Room Lab dedicated for research only and some word processing. The Library also has another (9) older workstations dispersed in the Media Center used for research only. Pilgrim has video conferencing equipment awarded through a RIDE grant, but is not well-utilized.

Warwick Vets - Warwick Vets High School's Local Area Network is comprised of approximately 362 networked devices distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services and Internet connectivity. Local Applications include Microsoft Office and is used primarily for word processing. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each English and Literacy department/classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 864 data drops and is distributed among seven Telecommunication Closets. The Main Distribution Frame (MDF) is located in the Women's Faculty Bathroom. Approximately, 192 drops are active. The MDF serves as the central wiring closet for the school and the demarcation point for telecommunication services for the Internet. This closet houses (4) 3COM SuperStack 3300 48-port 10/100 switches to support the end users terminating in this closet and (1) 3COMSuperStack 4900SX 6-port fiber switch used for backbone connectivity to remote closets. Also, a Cisco 2621 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud. All equipment is configured for Layer-2 Services, meaning that the network is not providing any additional security beyond what is implemented with Active Directory.

The first Intermediate Distribution Frame (IDF) is in the Teacher's Room in the Science Wing. Approximately 96 ports are active. This closet houses (2) 3COM SuperStack 4400 Switches, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity.

The second Intermediate Distribution Frame (IDF) is in Room CS-1. Approximately 144 ports are active. This closet houses (3) 3COM SuperStack 4400 Switches, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity. Also, the backbone from the Annex Building terminates in this closet.

The third Intermediate Distribution Frame (IDF) is in the Annex Building. Approximately 24 ports are active. This closet houses (1) 3COM SuperStack 3300 Switch, 24-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to CS-1 for interconnectivity to the rest of the network.

The fourth Intermediate Distribution Frame (IDF) is in the D-Wing Teacher's Room. Approximately 48 ports are active. This closet houses (1) 3COM SuperStack 3300 Switch, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity to the rest of the network.

The fifth Intermediate Distribution Frame (IDF) is in the Book Room in Room D318. Approximately 144 ports are active. This closet houses (3) 3COM SuperStack 3300 Switches, 48-port 10/100 for the end-users. Due to limited capacity, the district will be adding another 3COM Switch to support 48 more drops in this wing. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity.

The last Intermediate Distribution Frame (IDF) is in the Teacher's Room in B-Wing. Approximately 144 ports are active. This closet houses (3) 3COM SuperStack 3300 48-port 10/100 switches and (1) 3COM SuperStack 3300 24-port switch for the end-users. Finally, a gigabit fiber-optic backbone from this closet to the MDF is installed for interconnectivity.

Finally, Vets High School also supports 8-10 Computer Labs for academic use. The Media Center Lab is used for student research only. This Lab is equipped with OptiPlex GX150 Tower Computers that are approximately 4 years old. The remaining Labs in the School each contain approximately 24 computers and are used at scheduled sessions only. Any Word Processing or work on projects needs to be completed in the Writing Center. Veterans High School also has video conferencing equipment awarded through a RIDE grant and uses it for connections to RI Hospital to monitor operations.

Toll Gate High School - Toll Gate High School's Local Area Network is comprised of approximately 243 networked devices distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services and Internet connectivity. Local Applications include Microsoft Office used for word processing. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each English and Literacy department/classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 720 data drops and is distributed among four Telecommunication Closets. The Main Distribution Frame (MDF) is located in the Science Wing. Approximately, 192 drops are active. The MDF serves as the central wiring closet for the school and the demarcation point for telecommunication services for the WAN. This closet houses (4) 3COM SuperStack 4400 48-port 10/100 switches, (1) 3COM SuperStack 4400 24-port 10/100 switch to support the end users terminating in this closet and (1) 3COMSuperStack 4900SX 6-port fiber switch used for backbone connectivity to remote closets. Also, a Cisco 2621 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud. All equipment is configured for Layer-2 Services.

The first Intermediate Distribution Frame (IDF) is near the Library in Room B86. Approximately 288 ports are active. This closet houses (6) 3COM SuperStack 4400 Switches, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity.

The second Intermediate Distribution Frame (IDF) is near the Main Office in Room B29. Approximately 192 ports are active. This closet houses (4) 3COM SuperStack 4400 Switches, 48-port 10/100, and (1) 3COM SuperStack 4400 24-port switch for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity.

The third Intermediate Distribution Frame (IDF) is in the Music Wing. Approximately 48 ports are active. This closet houses (1) 3COM SuperStack 4400 Switch, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity to the rest of the network.

Toll Gate High School also supports several Computer Labs for academic use. The Drafting Lab houses approximately 20 computers and is used for instruction on AutoCad Lite 2004. The Math Lab has approximately 24 desktops and focuses on Geometry applications. Toll Gate also has (3) Business Labs and the Library has 24 computers dedicated to research.

Finally, Toll Gate High School has a video conferencing equipment setup in one Lab to provide remote instruction in Geometry to a homebound student as part of the IEP requirements.

Career Center at Toll Gate - The Career Center at Toll Gate operates as a separate network from the High School, similar to any other school in the district. The Local Area Network supports approximately 153 computers. The network is used to support five Labs in the Career Center. The Drafting Lab has 24 computers and is used for CAD instruction. The Macintosh Lab, used for computer production, houses approximately 24 desktops. Also, the Career Center has a Cisco Academy Lab used to teach students the concepts of networking, and has 15 workstations. The Electronics Lab utilizes approximately 15 desktops. The Career Center has a Microsoft Lab consisting of 18

computers. This Lab is functional, but since the program was stopped last academic year due to the lack of student participation.

Finally, the network consists of one Telecommunications Closet. The MDF supports approximately 240 active data drops. This closet has (3) Catalyst 3548XL 48-port 10/100 switches, (2) Catalyst 3524XL 24-port switches, and a Cisco 2621XM Router used to interface with the T1 connection to the Frame Cloud for access to the WAN.

Aldrich Junior High School - Aldrich Junior High School's Local Area Network is comprised of approximately 150 networked devices distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services, Math and Science applications and Internet connectivity. Local Applications include Microsoft Office used for word processing. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each English and Literacy department/classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 288 data drops and is distributed among three Telecommunication Closets. The Main Distribution Frame (MDF) serves as the central wiring closet for the school and the demarcation point for telecommunication services for the WAN. This closet houses (2) Dell PowerConnect 48-port 10/100 Switches and (1) Dell PowerConnect 24-port 10/100 switch to support the end users terminating in this closet. Also, a Cisco 2611 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud. As with Vets, all switch equipment in this School is configured for Layer-2 Services.

The first Intermediate Distribution Frame (IDF) supports approximately 120 active ports. This closet houses (3) dell PowerConnect 3048 Switches, 48-port 10/100, for the end-users. There is a gigabit fiber backbone from this closet to the MDF for interconnectivity to the network.

The second Intermediate Distribution Frame (IDF) is in the Basement in the Social Studies Office. Approximately 48 ports are active. This closet houses (1) Dell PowerConnect 3048 Switch, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF.

The Library has (8) PCs dedicated for research. There are three Computer Labs in Aldrich for academic use. The Lab in Room 205 has (26) Dell Optiplex GX150 and GX270s. The second Lab, in Room B7 is a Graphic Arts Lab. It house (12) PCs. Presently, there is no access to this Lab. Finally, there is a Lab with (16) Dell GX270 PCs that is utilized by the students.

Gorton Junior High School - Gorton Junior High School's Local Area Network is comprised of approximately 118 networked devices distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services, Math and Science applications and Internet connectivity.

Local Applications include Microsoft Office used for word processing. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each English and Literacy department/classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 288 data drops and is distributed among four Telecommunication Closets. The Main Distribution Frame (MDF) is located in Guidance. Approximately, 24 drops are active. The MDF serves as the central wiring closet for the school and the demarcation point for telecommunication services for the Internet. This closet houses (1) Cisco Catalyst 3524XL 24-port 10/100 switch to support the end users terminating in this closet. Also, a Cisco 1720 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud. As with Vets, all switch equipment in this School is configured for Layer-2 Services, meaning that the network is not providing any additional security beyond what is implemented with Active Directory.

The first Intermediate Distribution Frame (IDF) is in the Copy Room. Approximately 120 ports are active. This closet houses (2) Cisco Catalyst 3548XL Switches, 48-port 10/100, and (1) Catalyst 3524XL 24-port Switch for the end-users. There is a gigabit copper backbone from this closet to Room 110 for interconnectivity to the network.

The second Intermediate Distribution Frame (IDF) is in Room 110. Approximately 96 ports are active. This closet houses (1) Cisco Catalyst 3548XL Switch, 48-port 10/100, and (2) Catalyst 3524XL 24-port Switch for the end-users. There is a gigabit fiber-optic backbone from this closet to the Office IDF in the New Wing and a gigabit copper backbone to the Copy Room for interconnectivity. In addition, there is a wireless bridge installs that connects the Maintenance Building across the street via 11Mb wireless.

The third Intermediate Distribution Frame (IDF) is in the Office in the New Wing. Approximately 48 ports are active. This closet houses (1) Cisco Catalyst 3550G-48 Switch, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to Room 110 for interconnectivity to the rest of the network. Also, there is an Aironet Access Point in this closet support the wireless cart provisioned by the Math department, utilized by students in the area. Note: Gorton Junior High School is the only School in the district that has wireless laptop carts. The School has (2) carts with 30 laptops each.

Winman Junior High School - Winman Junior High School's Local Area Network is comprised of approximately 104 networked devices distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services, Math and Science applications and Internet connectivity. Local Applications include Microsoft Office used for word processing. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each English and Literacy department/classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 576 data drops and is distributed among five Telecommunication Closets. The Main Distribution Frame (MDF) is located in Computer Science A-200. Approximately, 96 drops are active. The MDF serves as the central wiring closet for the school. This closet houses (2) 3COM SuperStack 4400 48-port 10/100 switches to support the end users terminating in this closet. Also, (1) 3COM SuperStack 12-port fiber switch is installed to terminate the fiber backbones from the remote closets, providing gigabit speeds between closets. As with the other schools, all switch equipment in this School is configured for Layer-2 Services and is not configured for VLANs.

The first Intermediate Distribution Frame (IDF) is in the Main Office. Approximately 96 ports are active. This closet houses (2) 3COM SuperStack 4400 48-port 10/100 switches for the end-users. There is a gigabit copper backbone from this closet to the MDF for interconnectivity to the network.

The second Intermediate Distribution Frame (IDF) is on the lower level in the Storage Room. Approximately 72 ports are active. This closet houses (1) 3COM SuperStack 4400 Switch, 48-port 10/100, and (1) 3COM SuperStack 24-port Switch for the end-users. There is a gigabit fiber-optic backbone from this closet to the Main Office IDF. Also, unlike the other schools, this IDF houses the demarcation point for the connection to the WAN. A Cisco 1720 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud.

The third Intermediate Distribution Frame (IDF) is in the Storage Room across from A-301. Approximately 96 ports are active. This closet houses (2) 3COM SuperStack 4400 Switches, 48-port 10/100 for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF for interconnectivity to the rest of the network.

The fourth Intermediate Distribution Frame (IDF) is in Room B-346. Approximately 192 ports are active. This closet houses (3) 3COM SuperStack 4400 Switchs, 48-port 10/100, and (1) 3COM SuperStack 24-port Switch for the end-users. There is a gigabit fiber-optic backbone from this closet to the MDF.

Finally, as with the other Junior High Schools, Winman also has a MaxAttach external Network Data Storage System. This is used by various classes to store student data. In addition, the School has (2) Computer Labs for instruction. The older Lab has approximately (22) computers and is used for word processing. The Drafting Lab has (16) Dell OptiPlex GX270 computers used for CAD instruction.

Drum Rock Elementary School - Drum Rock Elementary School's Local Area Network is comprised of approximately 49 networked devices distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services and Internet connectivity. Local Applications include Leap frog 1, 2, 3 and Math Exemplar. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 192 data drops terminated in one Telecommunication Closet. The Main Distribution Frame (MDF) is located in the Storage Room behind Speech. Approximately, 72 drops are active. The MDF serves as the central wiring closet for the school and the demarcation point for telecommunication services for the WAN. This closet houses (1) Cisco Catalyst 3524XL 24-port 10/100 switch and a Dell PowerConnect 3348 48-port switch to support the end users terminating in this closet. Also, a Cisco 2801 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud. As with the other schools, all switch equipment in this School is configured for Layer-2 Services.

Each classroom has 2-3 computers for students and (1) computer for the teacher to use to access PLP. The Library has (4) computers for Catalog and Circulation. Drum Rock does not have a Computer Lab. Computer usage in this school is in the classroom and Library only.

Holliman Elementary School - Holliman Elementary School's Local Area Network is comprised of approximately 66 networked devices distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services and Internet connectivity. Local Applications include Leap frog 1, 2, 3 and Math Exemplar. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 84 data drops terminated in two Telecommunication Closets. The MDF serves as the central wiring closet for the school and the demarcation point for telecommunication services for the WAN. This closet terminates approximately 72 data drops. This closet houses (4) 3COM SuperStack 24-port 10/100 switches. Also, a Cisco 1700 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud. The IDF closet support 12 data drops. This closet houses (1) 3COM SuperStack 24-port switch. As with the other schools, all switch equipment in this School is configured for Layer-2 Services.

The Library has (4) computers for Catalog and Circulation, and each classroom has 3-4 computers for student use. Holliman does not have a Computer Lab.

Hoxsie Elementary School - Hoxsie Elementary School's Local Area Network is comprised of approximately 51 networked devices distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services and Internet connectivity. Local Applications include Leap frog 1, 2, 3 and Math Exemplar. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 120 data drops terminated in one Telecommunication Closet. The MDF serves as the central wiring closet for the school and the demarcation point for telecommunication services for the WAN. This closet

houses (5) Intel 460T 48-port 10/100 switches. Also, a Cisco 2821 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud. As with the other schools, all switch equipment in this School is configured for Layer-2 Services.

The Library has (4) computers for Catalog and Circulation. Hoxsie does not have a Computer Lab.

Warwick Neck Elementary School - Warwick Neck Elementary School's Local Area Network is comprised of approximately 71 networked devices distributed among a flat Ethernet network. The users on the network utilize it for several applications, including Library Automation, print services and Internet connectivity. Local Applications include Leap frog 1, 2, 3 and Math Exemplar. Staff uses the network for access to the Student Management System, Star Base and Star Portal. Also, one computer in each classroom is dedicated for the teacher for access to the PLP module in Star Base.

The Local Area Network has approximately a total of 192 data drops and is distributed among two Telecommunication Closets. The Main Distribution Frame (MDF) is located in the Main Office. Approximately, 96 drops are active. The MDF serves as the central wiring closet for the school and the demarcation point for telecommunication services for the WAN. This closet houses (4) Enterasys 24-port 10/100 switch to support the end users terminating in this closet. Also, a Cisco 2801 Router is housed in this closet and interfaces with the T1 connection to the Frame Cloud. As with the other schools, all switch equipment in this School is configured for Layer-2 Services.

The first Intermediate Distribution Frame (IDF) is in the Teacher's Room. Approximately 96 ports are active. This closet houses (4) Enterasys 24-port 10/100 switch to support the end users terminating in this closet. There is a 100BaseFX fiber-optic backbone from this closet to the MDF.

Each classroom has several computers for student use. Warwick Neck Elementary School has (1) Computer Lab dedicated for research only.

Server Infrastructure

There are approximately (40) servers in the remote schools for various applications and (19) servers in the Computer Center in the Administration Building. Each High School has (3) servers. The Junior High Schools have (2) servers each. Most of the Elementary Schools have (1) server, with the exception of (4) Elementary Schools that have (2) Servers each. Most of the servers in the Schools are Dell branded and range from P3 451Mhz to P4 3.0Ghz. All of the servers, except for one at Gorton Junior High, are running Windows 2000 Server SP4. The Schools have the following servers:

Aldrich Junior High:

- Application Server: Dell PowerEdge 1400SC 1.13Ghz, 512MB RAM, 18GB Hard Drive
- Application Server #2: Dell PowerEdge P4, 512MB RAM, 36GB Hard Drive

Cedar Hill Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive
- Application Server #2: Dell PowerEdge P4 2.4Ghz, 512MB RAM, 18GB Hard Drive

Drum Rock Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive
- Application Server #2: P3, 256MB RAM, 18GB Hard Drive

Francis Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Gorton Junior High:

- Application Server: P3, 256MB RAM, 9GB Hard Drive
- Application Server #2: P3 451Mhz, 256MB RAM, 18GB Hard Drive
- Application Server #3: Dell PowerEdge 1400SC 1.13Ghz, 512MB RAM, 18GB Hard Drive

Greene Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Greenwood Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Holden Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Holliman Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Hoxsie Elementary School:

- Application: P3, 256MB RAM, 9GB Hard Drive
- Application Server #2: Dell PowerEdge P4 2.4Ghz, 512MB RAM, 18GB Hard Drive

Lippitt Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Norwood Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Oakland Beach Elementary School:

- Application: P3, 256MB RAM, 9GB Hard Drive
- Application Server #2: Dell PowerEdge P4 2.4Ghz, 512MB RAM, 18GB Hard Drive

Park Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Pilgrim High School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive
- Application Server: Dell PowerEdge P4 2.4Ghz, 512MB RAM, 18GB Hard Drive
- Secondary Domain Controller: Dell PowerEdge P4 2.4Ghz, 512MB RAM, 18GB Hard Drive
- Portfolio Server (to be retasked as a Domain Controller): Server standard 2003, p4 2.8GHz 1.0GB RAM Dell PE 700

Potowomut Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Rhodes Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Robertson Elementary School:

- Application Server: P3, 256MB RAM, 18GB Hard Drive

Scott Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Sherman Elementary School:

- Application Server: Dell PowerEdge 1400SC 1.13Ghz, 512MB RAM, 18GB Hard Drive

Tollgate High School:

- Application Server: P3, 128MB RAM, 9GB Hard Drive for Tech Ed CAD
- Application Server: P3, 256MB RAM, 18GB Hard Drive for the Library (Follett's)
- Secondary Domain Controller: Dell PowerEdge P4, 512MB RAM, 36GB Hard Drive

Veterans Memorial High School:

- Application Server: Dell PowerEdge 1400SC 1.13Ghz, 512MB RAM, 18GB Hard Drive
- Secondary Domain Controller: Dell PowerEdge 1400SC 1.13Ghz, 512MB RAM, 18GB Hard Drive

Warwick Neck Elementary School:

- Application Server: P3, 256MB RAM, 18GB Hard Drive

Wickes Elementary School:

- Application Server: P3, 256MB RAM, 9GB Hard Drive

Winman Junior High:

- Application Server: P3, 128MB RAM, 9GB Hard Drive
- Secondary Domain Controller: Dell PowerEdge P4, 512MB RAM, 36GB Hard Drive

Wyman Elementary School:

- Application Server: P3, 256MB RAM, 18GB Hard Drive

The district is supported by the following servers:

- *WPS-NAV1:* Dell 1300 for Norton Anti-Virus v10 Corporate Edition
- *WPS-FS1:* Domain Controller running Windows 2003 Server
- *WPS-EDULOG:* supports FoxPro Transportation 2000 Application
- *Star Base Web Server:* Dell PowerEdge 2550 running Windows 2003 Server
- *Star Portal:* (for Portal Users): Dell PowerEdge 1750 running Windows 2003 Server and acts as a Domain Controller to separate domain
- *STPortal:* Dell PowerEdge 2650 running Windows 2003 Server provides portal access to PLP's
- *Stardb:* Oracle Database Server
- *Pentamation:* Financial Package: Dell PowerEdge 2850 running SCO UNIX
- *WebSense Reporter:* Dell PowerEdge 2850 running Windows 2003 Server
- *WPS-Exch3:* Dell PowerEdge 2850 running Windows 2003 Server and Exchange 2003
- *Backup:* runs Backup Exec v10.0 and backs up the 17 servers in the Computer Center; Also runs Legato Replistor to create active mirrors of 2 servers)
- *WPS-FS3:* File/Print Server for Administration Building and remote users (School Offices)
- *DC2:* Dell PowerEdge 4000SC running Windows 2003 Server – User domain for Portal Server
- *Providence:* Dell PowerEdge 1400SC running Windows 2000 Server – Backup for Admin domain and DNS for Windows 2000 users
- *WPS-DHCP1:* Dell PowerEdge 1400SC running Windows 2000 Server – provides DNS and DHCP services for all users
- *www:* Dell PowerEdge 1400SC – currently is the web server but will become DNS server when new web server comes online
- *Mail1:* Dell PowerEdge 2800 used for Teacher Mail
- *Intranet:* Clone used by (2) Junior High Schools for Intranet services
- *Scopeware Server:* Dell PowerEdge 4400 used for document Management
- *VAX* – AS/400 archives older Financial and Student Information System data

Backup

The district is in the process of implementing a Disaster Recovery Plan for Backup. Presently, the servers in the remote schools are not backed up. As a result, students need to save their files locally to a floppy or USB Jump Drive instead of on the server. The district maintains a base image of the OS for each server to utilize in case of failure. As

part of a new Backup Project, the district has implemented an EMC Clarion CX300 for Disaster Recovery. This project is divided into 2 phases. Phase 1 of this project, which is complete, was to configure backup to disk of all the Servers in the Computer Center. It uses Legato Replistor for replication of data to disk. Data is replicated every 30 minutes. The servers that are replicated are Stportal, Stardb, and WPS-EXCH3.

Following are the list of servers that are connected to the SAN, and the size of the data LUN that has been carved out to support it:

- *Wps-fs3:* 160GB LUN for file and print sharing – all data is on the SAN
- *Wps-exch3:* 133GB LUN currently for Exchange Information Store, but will be replaced with Firstclass
- *Wps-edulog:* 5GB LUN for Transportation DB server – The Database files are not currently on the SAN, but will be moved to the SAN over the summer
- *Replication:* 103GB LUN stores all of the replicated data onto the SAN from the server snapshots.
- *Stardb:* 20GB LUN for daily backups of the database
- *Stportal:* 20GB LUN for future expansion space for profiles when teacher data is moved to this system
- *Scopeware:* 241.57GB LUN for expansion room for document imaging / archival
- *Websense:* 20GB LUN for the reporting database of this application

All hosts have (2) Qlogic HBA Adapters connected to (2) separate SAN fabrics and are redundant. There are (2) McData 4500 Fiber Channel Switches cross-connected to (2) Storage Processors on the EMC Clariion.

For off-site backup, the District utilizes Backup Exec v10.0, running on the Replication Server, to perform a tape backup of the backup data on disk. A Dell PowerVault 132T Tape Library is directly attached. Tapes are stored off-site by Fire Mountain. The tapes are picked up weekly. Tapes are stored in a fire-proof safe in the Administration Building until picked up by Iron Mountain.

Phase 2 of the project is budgeted for next funding year and incorporates the remote servers in the district into the backup strategy.

Finally, the Administration utilizes the application Pentamation for financial management. This system is not included in the backup scheme. Backup of this server is local and performed as part of SCO Unix.

Applications
The users access the network for a variety of applications, including Follett's Library Automation, various curriculum applications, Print Services, and Internet Access. Applications vary by School, as follows:

Elementary Server Applications:

- Follett Library Automation
- Fitnessgram
- Instant Reader
- Leap Frog 1,2 and 3
- Math Exemplar
- Visual Planner
- GLE-Support
- Office 2000
- Publisher 2000
- Norton Anti-Virus Corporate Edition

Junior High school Server Applications:

- Follett Library Automation
- Fitnessgram
- Math Exemplar
- Visual Planner
- Algebra
- Various Math and Science Applications
- Online Encyclopedias
- Tech Ed Folders for student work (CAD)
- Office 2000
- Publisher 2000
- Norton Anti-Virus Corporate Edition

High School Server Applications:

- Follett Library Automation
- Fitnessgram
- Visual Planner
- Choices (Guidance Application)
- Various Business Applciations, Tutorials, and Online Workbooks
- Various Math, Science, and Social Studies Applications
- Online Encyclopedias
- Tech Ed Folders for student work (CAD and presentations)
- Office 2000
- Publisher 2000
- Norton Anti-Virus Corporate Edition

The Staff also uses the network to gain access to the Student Management System, Century Star Portal/Star Base. Star Base is the Oracle back-end of the Student Management System and Star Portal is the web front-end. StarBase is used for report cards, attendance, academic history, scheduling, grading, and PLPs. There is also a Medical module utilized by the Nurses in the district. Clerical people in each School perform the Data Entry. Teachers utilize the application to gain access to the PLP process only. In the elementary schools, the Main Office Secretary and the Principal update StarBase. In the Secondary Education Schools, the Main Office Secretaries and Guidance access and update the data in the database. The data in the Attendance module reflects morning Home Room attendance and truancy only. For 3rd quarter grading, the district will be doing a pilot with approximately 24 teachers at (1) Junior High School and (1) High School to do online grading for a single subject.

Administration utilizes Pentamation for financial and personnel data. There are approximately 40 users that access Pentamation. The majority of the users are located in Administration. The remote schools have read-only access. Administration is running a 1999 version of the software. All financial data prior to 1999 is stored on the AS/400. They are looking at upgrading to a new financial package in the next 12-18 months.

The network is also used for authentication, DNS, and DHCP services. These services are served centrally from the Computer Center at the Administration Building. If there is a Wide-Area Network failure, PCs that have already obtained an IP Address via DHCP and updated DNS information will be able to continue to function, but will not have access to any applications served from the Computer Center. If a PC has not obtained an IP Address that day, then that computer will not have access to any services at all.

Presently, File Services at each school are local to the computer. Each Student and Teacher has a generic login to the network. All files are saved locally on either a floppy disk or an external USB Jump Drive. For the Math and Tech Ed departments in the High Schools, an external Maxtor Storage system has been installed to save their students' data. The three High schools will each receive a new File Server in FY06 for Digital Portfolios, as part of a grant and Title IID monies. The other schools will continue to save locally to floppy or an external USB Drive.

Currently, Email is supported on two systems, Post Office and Exchange 2003. Post Office, running on Windows NT Server, provides teachers with email services. Exchange 2003 is used by Administration, Guidance, Department Heads, and other Staff. The district has just gone out to bid for a new Email solution, First Class, to consolidate the two systems in place. First Class would replace both Post Office Mail and Exchange 2003 to provide mail for teachers, Administration, School Committee, Guidance, Department Heads, Staff, and potentially High school Students.

Finally, the IT Staff utilizes several tools for technology administration. Primarily, they utilize Ghost to image desktops and laptops. They keep copies of all images for quick restore in case a computer needs to be re-imaged.

Staffing

The IT Staff that supports the Information Technology Systems in the district consists of the Manager of Information Systems, the Assistant Information Services Manager, (4) Technicians, (1) Systems Analyst and (3) Data Specialists. There are plans to add a 5th Technician in the next 3 months.

The Manager of Information Systems is responsible for the coordination of the administrative technological and operations of the district, as well as, the evaluation and implementation of computers and technology in all administrative programs. Also, this position includes the responsibilities of Supervising the IS Department and its staff.

The Assistant Information Services Manager maintains the network and server infrastructures. This position reports directly to the Manager of Information Systems. Responsibilities include the day-to-day LAN/WAN activity, provide security for data on the network, manage network traffic, maintain user accounts, oversee monitoring and network monitoring services, software vendors and maintain system documentation.

The Technicians are responsible for the repair, upgrading, and maintenance of all computers and computer-related technology in the district. The Technicians support 30 locations and work on a rotating school schedule. One week is dedicated to the Secondary Schools and the following week is dedicated to the Elementary Schools. The Technicians report directly to the Assistant Information Services Manager.

The Systems Analyst maintains the databases for StarBase and Pentamation. This position receives supervision from the Manager of Information Systems. Responsibilities include some programming of the databases with Oracle utilities and supervising the Data Specialists.

The Data Specialists act as the backup to the Systems Analyst and provide Help-Desk support to the end users (to the teacher level). They are responsible for the State reporting of data for the district. In addition, the Data Specialists create database processes for various form generation for the district, such as building access, event planning, and misc. billing. They are also responsible for file and record maintenance in the databases. This position reports directly to the Systems Analyst.

One position that has been vacant for over a year is an Educational Technology Specialist. This position works with the School and its teachers to integrate technology into the curriculum and act as a liaison between the Educators and the IS Staff to develop the plans and acquisition of needed technology. The district has approved a new position, Technology Applications/Assessment Coordinator, to fill this older position. This position will be responsible for the supervision, initiation, development, and execution of services connected with the application of technology K12 and compliance with assigned assessment requirements.

Responsibilities include:

- Supervision and coordination of the Media and Educational Technology staff
- Develop and maintain manual of policies and guidelines related to technology and media in conduction with the Manager of Information Services
- Oversee the application of all educational technology used to support instruction, curriculum and assessment.
- Provide staff development in technology applications including those related to instruction, curriculum and assessment
- Work with K-12 Curriculum and District Strategic Planning committees for technology integration
- Prepare the annual Media/Technology budget and report
- Chair and organize the district Graduation by Proficiency Design Team; Meet and support regularly with school-based staff on graduation by proficiency issues
- Development and implement a Senior Exhibition Project and Digital Portfolio Handbooks
- Develop instruments for graduation by proficiency program assessment in compliance with RIDE guidelines and expectations

End-User Support
Support for the end-users are based on a ticket and scheduling system. If an end-user requires assistance, the end-user emails the Help Desk with the details. These emails are reviewed and prioritized by the IT Staff. The Technicians are scheduled to visit each School on specific days. One week is dedicated to the Secondary Schools and the following week is dedicated to the Elementary Schools. Emergencies are escalated to the top of the list and scheduled accordingly. Presently, there is no system or procedure in place to track response time, turn-around time or frequency. As noted in the recommendations section, the district needs to implement a management tool for tracking purposes.

Professional development
The IT Staff of Warwick School District does not take a major role in the actual Professional Development of the end users, with exception of any training that is needed to support a district initiative or an administrative application. For example, with the addition of the new PLP module in Star Base, any training required on that module will be performed by the IT Staff. If the training is educational technology-based, then that will be completed by the Technology Application Assessments Coordinator. The IT Staff will work with that Technology Application Assessment Coordinator to make sure the required technology is in place for the training. If training is needed for the Administrative Staff, then that will be performed by the IT Team.

The IT Staff also requires Professional Development. The Manager Of Information Systems determines the needs for additional training for each staff member and sends him/her to the appropriate training to support their job requirements.

Contracts
The IT Staff of the Warwick School Department utilizes approximately (20) contracts to gain support for the district system and provide on-going services for the critical components of the technology infrastructure.

For Internet Access and WAN connectivity, as described previously, the district has engaged with RINET (Rhode Island Network for Education Technology). The annual FY06 cost of this contract is approximately $76,000. This includes the T1 connection from each School to the Frame Cloud, the T3 connection from Administration to the Frame Cloud and the 20MB Internet connection to RINET. This contract does not include maintenance. Maintenance is procured through a separate contract with Atrion.

For the network management, maintenance, and monitoring of the Wide-Area Network, the School District has engaged into a contract with Atrion. Atrion monitors the WAN on a 24x7 basis. The district has been utilizing Atrion for approximately 8 years. Since Atrion has such an in-depth knowledge of the system, the district utilizes the organization for planning and design purposes. Currently, the contract is broken into two components, network management/maintenance and network monitoring. The network management/maintenance (called MAXTime Support Agreement) contract costs approximately $35,000 annually and includes only the equipment to the edge of each school. The contract does not include any network equipment beyond the Wide-Area Network. It does include 24x7 remote telephone support with a 2 hour callback and updates within 4 hours, 24x7 onsite support for only the equipment covered under contract, spare parts delivery same day within 4 hours, and managed services. The monitoring contract costs approximately $26,500 annually. If an issue with the WAN occurs, Atrion will attempt to resolve the problem remotely. If unable, the company will dispatch an Engineer onsite to address the issue.

Atrion monitors the following equipment:

Administration Building:
- Cisco Catalyst 4507 Core Switch
- Packeteer PacketShaper 2500
- Cisco PIX 525
- Cisco 3725 Router
- (2) Cisco Catalyst 3524XL
- Cisco Catalyst 3548XL
- Cisco Aironet 1220 Access Point

Maintenance:
- Cisco Aironet BR350 Wireless Bridge
- Cisco Aironet 1220 Access Point

Gorton Junior High School:

- Cisco Aironet BR350 Wireless Bridge
- Cisco 1720 Router (for WAN connection)

Lippitt Elementary School:

- Cisco 1720 Router (for WAN connection)
- Cisco Aironet 1231 Access Point

Greenwood Elementary School:

- Cisco 2801 Router (for WAN connection)
- Cisco Aironet 1231 Access Point

The remaining schools only have their respective WAN router under contract, as follows:

- *Aldrich Junior High:* Cisco 2621 Router
- *Career Center:* Cisco 2621 Router
- *Cedar Hill School:* Cisco 2801 Router
- *Drum Rock School:* Cisco 2801 Router
- *Greene School:* Cisco 2801 Router
- *Holden School:* Cisco 2801 Router
- *Holliman School:* Cisco 2801 Router
- *Hoxsie School:* Cisco 2801 Router
- *JB Francis School:* Cisco 1720 Router
- *Norwood School:* Cisco 2801 Router
- *Oakland Beach School:* Cisco 2801 Router
- *Pilgrim High School:* Cisco 2621 Router
- *Potowomut School:* Cisco 1720 Router
- *Rhodes School:* Cisco 2801 Router
- *Robertson School:* Cisco 2801 Router
- *Scott School:* Cisco 2801 Router
- *Sherman School:* Cisco 2801 Router
- *TollGate High School:* Cisco 2621 Router
- *Wickes School:* Cisco 2801 Router
- *Winman Junior High School:* Cisco 1720 Router
- *Wyman School:* Cisco 1720 Router
- *Vets High School:* Cisco 2621 Router

Several of the key academic and administrative applications and hardware are also covered under contract. The SunGuard Pentamation Financial package is covered under a Maintenance and Upgrade Contract that costs approximately $56,000 annually. This contract covers Human Resources, Financial Accounting, 4Js, Cognos, Opti, software licensing and upgrades, diagnostics, Easy Spooler, Formsxpress, SCO Unix, Informix DB Engine and License. Pentamation runs on a Compaq ProLiant 6000 that has extended hardware warranty to provide for onsite parts and labor. This maintenance costs $2,800 per year.

For the Student Management System, StarBase, the district has a contract with Century Consultants for software support and maintenance that costs approximately $38,000. StarBase runs on Dell PowerEdge 2400 Server. The extended warranty maintenance agreement for this server is approximately $2,800.

To provide for content filtering, the district utilizes WebSense and has approximately 2000 licenses. The yearly renewal for WebSense is $56,000.

Another key academic contract is the Microsoft School License Agreement. This contract provides support and upgrades for the following Microsoft products:

- Operating System
- Office Professional XP
- Visual Studio
- Encarta
- Client Access License for Microsoft Server

This agreement includes coverage for 3,000 licenses and is approximately $117,600 yearly.

For Anti-Virus protection, the district has acquired a contract for Symantec Anti-Virus which is approximately $24,000 yearly for renewal and additional licenses.

For Library Automation, the district has invested in Follett's and has a yearly contract for hardware and software support for 26 locations. It includes Circulation and Catalog, PHD, and Scanners. The yearly cost for this contract is $22,000. The Web Clarity software component of Follett's for each school is $99 per year, for a total yearly contract cost of $2,574.

In addition to the software support contracts in place, the Warwick School Department invests in several hardware support and maintenance contracts, as well. For server support, all servers are purchased with a 3-year onsite warranty for parts and labor. The district has invested in extended warranty contracts for any server less than 5 years old through Dell. The Extended coverage provides parts and labor support. Costs vary by model. For Microsoft Network Operating System support for these servers, the district has a 5-Incident Application Support Contract direct with Microsoft, which costs $1225 per year.

Desktops and laptops are also purchased with a 3-year warranty. Extended coverage for the desktops varies. The district does have a contract in place with Dell for 2-year maintenance renewal on a number of computers. This equates to approximately $20,000 per year. The laptop warranty does not include accidental insurance.

Finally, the district has several critical hardware components that require maintenance coverage as follows:

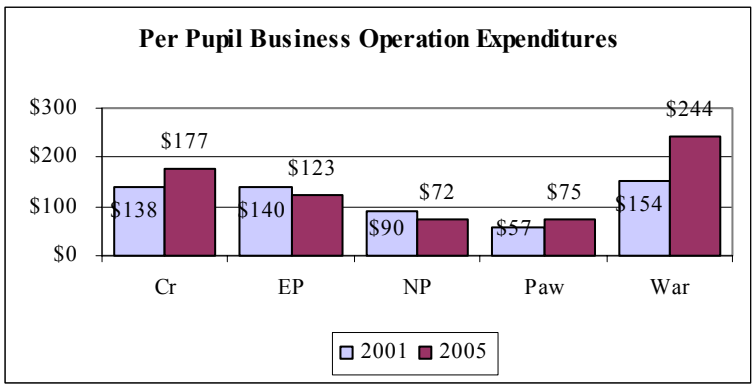
- *Decision One*: covers the VAX Hardware that houses archived Financial and Student Management info – coverage includes the maintenance of the VAXC, associated printers and DecServers: $2,400
- *Source Technologies:* provides hardware maintenance for the Payroll Check Printer: $1,200
- *Iron Mountain Tape Facility:* provides off-site storage for backup tapes (weekly pickup): $2,160

VII. Warwick School District's Central Administration Function and Office of Business Affairs

The Warwick School District spent $12,383 per pupil in FY 2005, ranking highest among its peer school districts in the benchmarking analysis of this report. The Warwick School District is a multi-faceted system that supports the educational needs of nearly 12,000 students and approximately 1,140 teachers. This involves providing the support for 26 public schools and one career center.

The following is an analysis of the Warwick School Department's Central Business Operations (CBO). There are several facets of the Central Business Office, of which only portions will be reviewed in the following report. The following will briefly look at operating expenditures, the current staffing levels and duties, and RIPEC recommendations to modernize the CBO and/or to increase efficiencies given the significant financial obligations facing the School District when a teacher contract is negotiated and ratified. The School District, in cooperation with the City Administration, must begin looking at how it currently provides central services to the school district and its schools. There are opportunities to maintain or even enhance existing services with fewer resources, which will be invaluable in ensuring the School District meets its educational goals in the future.

Overview of Spending Program



Warwick's total operation expenditures increased from $21.6 million in FY 2001 to $24.5 million in FY 2005. In FY 2001, expenditures for operations accounted for 17.6 percent of total expenditures. This has declined to 16.6 percent in FY 2005. Facilities expenditures represented the largest component of total operation dollars, with the $12.9 million representing half of Warwick's operations expenditures.

The second largest component within operations is expenditures for business operations. Business operations expenditures increased by $1.0 million - from $1.9 million in FY 2001 to $2.9 million in FY 2005. This translates into an average annual growth rate of 11.3 percent. Business operations expenditure growth accounted for 4.2 percent of the total growth rate. This was the highest share among the peer school districts included in the benchmarking section of this report. Expenditures for business operations as a percent of total expenditures ranged from a high of 2.0 percent in Warwick to a low of 0.6 percent in North Providence in 2005. On a per pupil basis, business operation expenditures ranged from a low of $57 per pupil in Pawtucket to a high of $244 in Warwick. Expenditures for business operations include the cost of business offices (e.g.

payroll, human resources, accounting and finance, procurement). It also includes salaries and related employment costs, office expenses and all other departmental costs.

Staffing Summary

The Warwick School Department's central administration includes five functions - the Office of the Superintendent, the Office of Compliance and Human Resources, the Office of Business Affairs, the Office of Special Services and the Physical Education Office. (Analysis does not include facilities). In total, the central office includes 129.1 FTE positions. However, there are 62.0 FTE positions that are related to bus drivers and bus aides, which do not provide direct central services to the school district. If one excludes these positions, the central administration has 67.1 FTE positions in direct support for the school district. Slightly less than half of the net FTE positions are considered professional (46.3 percent), and the 53.7 percent balance is made up of secretarial and clerical staff. The table below outlines the allocation of the FTE positions as they are currently presented by the School Department.

The Office of the Superintendent has 8.5 FTE positions, of which 4.0 are professional staff, 4.0 are secretarial staff and the 0.5 FTE balance is in clerical. The Office of Human Resources and Compliance has 11.6 FTE positions, of which 3.6 FTE positions are professional staff, 7.0 FTE positions are clerical, and 1.0 FTE is secretarial.

The Central Business Office (CBO) includes 98.0 FTE positions (note that the Energy Manager, who is off-site, is still included in these figures). There are essentially five major functions under the direction of the Director of Business Affairs – Business Office, Purchasing, Controller, Transportation, and Information Technology. The CBO has 19.0 FTE positions that are considered professional positions, 1.0 FTE position that is secretarial, 16.0 FTE positions that are clerical and 62.0 FTE positions for busing services. If one excludes the bus drivers and the bus aides, the CBO has a net of 36.0 FTE positions, of which half are professional and half are support staff.

Warwick School Department - Central Office
Full Time Equivalent Positions

Central Administration	Professional	Secretarial	Clerical	Other	Total
Superintendent Office	4.0	4.0	0.5	0.0	8.5
Human Resources and Compliance	3.6	1.0	7.0	0.0	11.6
Special Services	4.0	2.0	3.0	0.0	9.0
Athletics	0.5	0.0	1.5	0.0	2.0
Business Affairs	2.0	1.0	0.0	0.0	3.0
- Business Office/Purchasing	1.0	0.0	7.0	0.0	8.0
- Controller	4.0	0.0	7.0	0.0	11.0
- Transportation	1.0	0.0	2.0	62.0	65.0
- Information Technology	11.0	0.0	0.0	0.0	11.0
Business Affairs subtotal	19.0	1.0	16.0	62.0	98.0
Total - Central Office	31.1	8.0	28.0	62.0	129.1
Percent of Total Staff	24.1%	6.2%	21.7%	48.0%	
Total Central Office (no busing staff)	31.1	8.0	28.0		67.1
Percent of Total Staff	46.3%	11.9%	41.7%		

*Other includes bus drivers and bus aids

Source: Warwick School Department data (2006) and RIPEC Calculations

Personnel Budget

In terms of the Central Administrative Function (excludes facilities and maintenance funding and staff of approximately 150.0 FTE positions), there is approximately $7.8 million in personnel costs supporting 129.1 FTE positions built into the FY 2006 budget. Of this amount, the budget includes $2.8 million to support professional staff (31.1 FTE positions), $500,000 for secretarial staff (8.0 FTE positions) $1.5 million for clerical staff ($28.0 FTE positions) and $3.0 million for busing (62.0 FTE positions).

Of the $7.8 million in total staffing costs in FY 2006, approximately $5.8 million supports direct salaries and $2.0 million for benefits, such as medical, dental and FICA. Salaries therefore represent 74.2 percent of staffing costs while 25.8 percent supports benefits. This ratio does differ depending on the type of position. For example, the portion allocated to salaries ranges from 78.0 percent for professional to 70.4 percent for bus drivers and bus aides.

If one excludes the busing staff, the personnel budget for the Central Administration Office is $4.8 million, supporting 67.1 FTE positions. Professional staff funding represents approximately 60.0 percent of the net personnel budget while secretarial and clerical personnel costs make up the 40.0 percent difference.

Warwick School Department - Central Office
Estimated Salaries and Benefits

Central Administration	Professional	Secretarial	Clerical	Other	Total
Superintendent Office	$582,657	$247,350	$41,401	$0	$871,408
Human Resources and Compliance	364,247	64,741	380,817	0	809,805
Special Services	483,188	122,585	151,335	0	757,108
Athletics	41,401	0	69,822	0	111,223
Business Affairs	232,959	54,381	0	0	287,340
- Business Office/Purchasing	81,691	0	386,608	0	468,299
- Controller	269,573	0	376,952	0	646,525
- Transportation	94,481	0	109,808	3,041,221	3,245,510
- Information Technology	646,209	0	0	0	646,209
Business Affairs subtotal	1,324,913	54,381	873,368	3,041,221	5,293,883
Total - Central Office	$2,796,406	$489,057	$1,516,743	$3,041,221	$7,843,427
Percent of Total Staff	35.7%	6.2%	19.3%	38.8%	
FTE	31.1	8.0	28.0	62.0	129.1
Cost Per FTE	$89,917	$61,132	$54,169	$49,052	$60,755
Total Central Office (no busing staff)	2,796,406	489,057	1,516,743		4,802,206
Percent of Total Staff	58.2%	10.2%	31.6%		$71,568
Cost Per FTE					

*Other includes bus drivers and bus aids

Source: Warwick School Department data (2006) and RIPEC Calculations

The cost per FTE position varies depending on the type of employee. Overall, the central administration function requires $7.8 million, which supports 129.1 FTE positions – this translates into an average cost per FTE of $60,755 in FY 2006. However, if one removes the bus drivers and aides from this analysis, the net cost of the Central Administration function is $4.8 million, supporting 67.1 FTE positions – this translates into an average FTE cost of $71,568.

Central Administration
Summary of Cost Per FTE Position

Staffing	FTE	Salaries	Benefits	Compensation Total	Compensation Average
Professional	31.1	$2,178,125	$618,281	$2,796,406	$89,917
Secretarial	8.0	385,139	103,918	489,057	61,132
Clerical	28.0	1,119,709	397,034	1,516,743	54,169
Busing	62.0	2,140,358	900,863	3,041,221	49,052
Total	**129.1**	**$5,823,331**	**$2,020,096**	**$7,843,427**	**$60,755**

Source: Warwick School Department data (2006) and RIPEC Calculations

The cost per professional FTE position is estimated at $89,917 – based on a personnel budget for these positions of $2.8 million and 31.1 FTE positions. The cost per secretarial FTE position is estimated at $61,132 – based on a personnel budget for these positions of $500,000 and 8.0 FTE positions. The cost per clerical FTE position is estimated at $54,169 – based on a personnel budget for these positions of $1.5 million and 28.0 FTE positions. The cost per busing FTE position is estimated at $49,052 – based on a personnel budget for these positions of $3.0 million and 62.0 FTE positions.

Superintendent Office

The Superintendent's Office is responsible for the overall management and academic performance of the school district. Per directions of the school committee, the Superintendent and his immediate staff are assigned to carryout the mission of the Warwick School Department.

Superintendant Office

Position	FTE	Salary	Benefits	Total	Cost/FTE
Professional	4.0	$444,289	$138,368	$582,657	$145,664
Secretarial	4.0	194,720	52,630	247,350	61,838
Clerical	0.5	30,106	11,295	41,401	82,802
Total	**8.5**	**$669,115**	**$202,293**	**$871,408**	**$102,519**

Source: Warwick School Department data (2006) and RIPEC Calculations

The Superintendent's Office, made up of 8.5 FTE positions, includes 4.0 professional management positions, including the Superintendent, the directors of elementary and secondary education, and the grants coordinator. There is also a part-time truancy administrator that is attached to this office. The office is supported with 4.0 FTE secretarial positions. The Superintendent's Office has a personnel budget of nearly $871,400, of which $582,700 (66.9 percent) is to support the costs of the professional staff and the $288,800 balance to provide for the 4.5 FTE positions that are allocated to secretarial staff and truancy. Of the $871,400 in personnel expenditures, $669,100 is for wages and salaries and the $202,300 balance is for benefits.

The average cost per FTE position for the Office is $102,519, which is 43.2 percent higher than the average cost per FTE position for the entire Central Office ($71,568). For professional staff only, the average cost per FTE position is $145,700, which is 62.0 percent higher than the average cost per FTE for professional staff for the entire Central Office ($89,917). For the secretarial staff in the office, the average cost per FTE is $61,838, which is 1.1 percent higher than the average cost per FTE secretarial staff for the entire Central Office ($61,132).

Office of Compliance and Human Resources

The Office functions as the School District's central human resources division and coordinates all legal compliance in the district with the exception of special services. Responsibilities include, but are not limited to all personnel record keeping associated

with retired, active or substitute personnel and the recruitment and hiring of professional, administrative and classified staff and substitutes. The Office maintains and tracks staffing issues, including leave requests, entitlements, work related injuries and FMLA leaves. The Office develops job postings and descriptions, and conducts legally mandated background checks on applicants. The Office also investigates, initiates and/or documents all disciplinary matters involving all staff, and the defense of, supervision of and/or the monitoring if all legal matters against the School Committee and its managers/supervisors. The Office also supports the on-going administration and negotiation of the collective bargaining agreements including the administration of health insurance and other entitlements.

Office of Compliance and Human Resources

Position	FTE	Salary	Benefits	Total	Cost/FTE
Professional	3.6	$281,498	$82,749	$364,247	$101,180
Secretarial	1.0	47,655	17,086	64,741	64,741
Clerical	7.0	273,803	107,014	380,817	54,402
Total	**11.6**	**$602,956**	**$206,849**	**$809,805**	**$69,811**

Source: Warwick School Department data (2006) and RIPEC Calculations

The Office is made up of 11.6 FTE positions, requiring a personnel budget of approximately $810,000 million. Of the $810,000 in personnel expenditures, $603,000 (74.4 percent) is for wages and salaries and the $207,000 balance (25.6 percent) is for benefits. Approximately $365,000 of the personnel budget supports 3.6 FTE positions that are professional staff, and $446,000 supports secretarial and clerical staff. Of this staffing level, approximately 3.6 FTE positions are professional, 1.0 FTE position is secretarial and the 7.0 FTE balance is clerical support. Clerks are assigned a range of duties to include monitoring benefits, pensions and workforce attendance.

The average cost per FTE position for the Office is $69,811, which is 2.0 percent less than the average cost per FTE position for the entire Central Office. For professional staff only, the average cost per FTE position is $101,180, which is 14.0 percent higher than the average cost per FTE for professional staff for the entire Central Office. For the 7.0 clerical FTE positions, the average cost per FTE is $54,402, which is less than 1.0 percent higher than the average cost per FTE clerical staff for the entire Central Office.

Office of Special Services

The Special Services function is made up of 9.0 FTE positions, to include the Director, 3.0 Assistant Directors and 2.0 secretarial and 3.0 clerical FTE positions. Clerical positions include several data entry clerks for attendance and other record keeping. Personnel costs for the function total nearly $760,000 of which $575,000 (75.8 percent) is for wages and salaries and the $183,000 balance (24.2 percent) is for benefits. Approximately $484,000 of the personnel budget supports 4.0 FTE positions that are professional staff, and $273,100 supports secretarial and clerical staff.

The average cost per FTE position for the Office is $84,123, which is 17.5 percent more than the average cost per FTE position for the entire Central Office. For professional staff only, the average cost per FTE position is $120,797, which is 34.3 percent higher than the average cost per FTE for professional staff for the entire Central Office. For the 3.0 clerical FTE positions, the average cost per FTE is $50,445, which is 6.9 percent less than the average cost per FTE clerical staff for the entire Central Office. The 2.0 FTE positions for secretarial services average $61,293 per position, which is less than 1.0 percent higher than the average cost per FTE for secretarial staff for the entire Central Office.

Office of Special Services

Position	FTE	Salary	Benefits	Total	Cost/FTE
Professional	4.0	$360,389	$122,799	$483,188	$120,797
Secretarial	2.0	97,289	25,296	122,585	61,293
Clerical	3.0	116,798	34,537	151,335	50,445
Total	**9.0**	**$574,476**	**$182,632**	**$757,108**	**$84,123**

Source: Warwick School Department data (2006) and RIPEC Calculations

Office of Health and Physical Education

A compliment of 2.0 FTE positions is allocated to support this function of the Warwick School District Central Office. The total personnel costs of $111,200 support a part-time coordinator and 1.5 office clerks. Total personnel costs include $81,300 (73.1 percent) for salaries and the $30,000 balance is for benefits (26.9 percent) of the personnel budget for the Office. The 1.5 clerical FTE positions average cost per FTE is $46,548, which is 14.1 percent less than the average cost per FTE clerical staff for the entire Central Office.

Office of Health and Physical Education

Position	FTE	Salary	Benefits	Total	Cost/FTE
Professional	0.5	$30,106	$11,295	$41,401	$82,802
Clerical	1.5	51,165	18,657	69,822	46,548
Total	**2.0**	**$81,271**	**$29,952**	**$111,223**	**$55,612**

Source: Warwick School Department data (2006) and RIPEC Calculations

Office of Business Affairs (Central Business Office – CBO)

The Office of Business Affairs is headed by the Director, who is responsible for the purchasing and control functions, information technology, and transportation. Each of these offices are direct reports to the Director of Business Affairs. This analysis includes the Energy Manager, who reports to the Business Manager but is not physically located in the Central Office Building. The Office has 98.0 FTE positions, of which 62.0 FTE positions represent bus drivers and bus aides. Given these positions do not support central business office functions, the net FTE position count is 36.0 FTE positions.

The personnel budget to support the staffing levels in the CBO is approximately $5.3 million. If one excludes the 62.0 FTE positions directly related to busing services, the net personnel costs are $2.3 million. The remainder of this analysis will not consider the 62.0 FTE positions related to busing as part of the costs associated with the central business office. Of the $2.3 million in personnel expenditures, $1.8 million is for wages and salaries (78.0 percent) and the $500,000 balance is for benefits (22.0 percent).

The business office function represents nearly 47.0 percent of the net expenditures for the Central Administrative Function and 54.0 percent of the net FTE positions included in the Central staffing plan. It should be noted that of the 36.0 FTE positions, 19.0 FTE positions are professional positions (includes all IT personnel) and 17.0 are clerical or secretarial in nature. In other words, nearly half of the staffing is in support of the functions outlined above. However, the funding to support professional staff represents 60.0 percent of the total CBO (excluding busing staff), with the remaining 40.0 percent representing the support staff.

Central Business Office

Position	FTE	Salary	Benefits	Total	Total
Professional	19.0	$1,061,843	$263,070	$1,324,913	$69,732
Secretarial	1.0	45,475	8,906	54,381	54,381
Clerical	16.0	647,837	225,531	873,368	54,586
Other	62.0	2,140,358	900,863	3,041,221	49,052
Total	**98.0**	**$3,895,513**	**$1,398,370**	**$5,293,883**	**$54,019**
Exclude Bus Drivers and Bus Aides					
Professional	19.0	$1,061,843	$263,070	$1,324,913	$69,732
Secretarial	1.0	45,475	8,906	54,381	54,381
Clerical	16.0	647,837	225,531	873,368	54,586
Total	**36.0**	**$1,755,155**	**$497,507**	**$2,252,662**	**$62,574**

Source: Warwick School Department data (2006) and RIPEC Calculations

The average cost per FTE position for the Office is $62,574, which is 12.6 percent less than the average cost per FTE position for the entire Central Office ($71,568). For professional staff only, the average cost per FTE position is $69,732, which is 22.4 percent lower than the average cost per FTE for professional staff for the entire Central Office. For the 16.0 clerical FTE positions, the average cost per FTE is $54,586, which is less than 1.0 percent more than the average cost per FTE clerical staff for the entire Central Office. The 1.0 FTE position for secretarial services for $54,381 is 11.0 percent lower than the average cost per FTE for secretarial staff for the entire Central Office. The following outlines similar trends in the divisions within the Office of Business Affairs.

Senior Management

The Director of Business Affairs leads the Central Business Office and has one secretary position reporting directly to him. In addition, while not on the premisis, the Energy Manager also reports directly to the Director. These three positions require a funding level to support the personnel costs of $287,340, with approximately 81.0 percent of this funding allocated to support the two professional positions. The Director is responsible for coordinating all business office activities, including purchasing, accounting, transportation services and information technology.

Central Business Office - Senior Management

Position	FTE	Salary	Benefits	Total	Cost/FTE
Professional	2.0	$179,425	$53,534	$232,959	$116,480
Secretarial	1.0	45,475	8,906	54,381	54,381
Total	**3.0**	**$224,900**	**$62,440**	**$287,340**	**$95,780**

Source: Warwick School Department data (2006) and RIPEC Calculations

Controller

The Controller is made up of 11.0 FTE positions, to include the Controller, 3.0 accountant staff, and 7.0 FTE clerical positions. The clerical positions include the Medicaid Account Clerk, who is primarily responsible for supporting the process of identifying appropriate expenditures for Medicaid-eligible reimbursements – which are currently projected to be in the neighborhood of $2.0 million annually.

The total personnel budget for the control function is $646,525, of which $269,600 (41.7 percent) is allocated to support the professional staff and $377,000 (58.3 percent) is to support the 7.0 support staff. Of the $646,525 in personnel expenditures, $498,600 is for wages and salaries and the $147,930 balance is for benefits received.

Central Business Office - Controller

Position	FTE	Salary	Benefits	Total	Cost/FTE
Professional	4.0	$207,920	$61,653	$269,573	$67,393
Clerical	7.0	290,674	86,278	376,952	53,850
Total	**11.0**	**$498,594**	**$147,931**	**$646,525**	**$58,775**

Source: Warwick School Department data (2006) and RIPEC Calculations

The average cost per FTE position for the Controller Office is $58,775, which is 17.9 percent less than the average cost per FTE position for the entire Central Office ($71,568). For professional staff only, the average cost per FTE position is $67,393, which is 25.0 percent lower than the average cost per FTE for professional staff for the entire Central Office. For the 7.0 clerical FTE positions, the average cost per FTE is $53,850, which is essentially at the average cost per FTE clerical staff for the entire Central Office ($54,169).

Purchasing

The purchasing function is responsible for developing and issuing requests for proposals per current bid requirements as outlined in the school district's purchasing manual. There are 8.0 FTE positions to support its function, led by the Purchasing Manager. The balance of the staffing is a range of clerks performing various functions within purchasing, such as accounts payable, and purchase order reviews. The total personnel budget for the purchasing function is $468,300, of which $81,691 is to support the Manager and $386,600 is to support the 7.0 support staff. Of the $468,300 in personnel expenditures, $344,800 (73.6 percent) is for wages and salaries and the $123,500 (26.4 percent) balance is for benefits.

Central Business Office - Purchasing

Position	FTE	Salary	Benefits	Total	Cost/FTE
Professional	1.0	$64,673	$17,018	$81,691	$81,691
Clerical	7.0	280,128	106,480	386,608	55,230
Total	**8.0**	**$344,801**	**$123,498**	**$468,299**	**$58,537**

Source: Warwick School Department data (2006) and RIPEC Calculations

The cost per FTE position for the Purchasing Office is $58,537, which is 18.2 percent less than the average cost per FTE position for the entire Central Office ($71,568). For the 7.0 clerical FTE positions, the average cost per FTE is $55,230, which is 2.0 percent above the average cost per FTE clerical staff for the entire Central Office.

Information Technology

The Information Technology function is staffed with 11.0 FTE positions, ranging from an IT Manager to a number of data and system technicians. The IT function is responsible for implementing technology solutions and maintaining and updating existing IT resources throughout the district. There is no direct clerical staff positions currently attached to the IT function. Most of the work is done in-house, and clerical support for the central business office is relied upon for any supplementary clerical staff.

Central Business Office - Information Technology

Position	FTE	Salary	Benefits	Total	Cost/FTE
Information Services Manager	1.0	$75,280	$10,924	$86,204	$86,204
Information Services Asst. Manager	1.0	30,794	4,625	35,419	35,419
System Analyst	1.0	73,228	18,809	92,037	92,037
Computer Technicians	5.0	238,372	51,965	290,337	58,067
Data Specialist	3.0	116,869	25,343	142,212	47,404
Total	**11.0**	**$534,543**	**$111,666**	**$646,209**	**$58,746**

Source: Warwick School Department data (2006) and RIPEC Calculations

The FY 2006 budget includes approximately $646,200 in direct personnel costs to support these 11.0 FTE positions. Of the $646,200 in personnel expenditures, $534,500 is for wages and salaries (83.0 percent) and the $112,000 balance is for benefits. The average cost per FTE position is $58,746, which is 17.2 percent lower than the average cost per professional FTE position within the Central Office ($70,958). Additional details regarding the IT staff and its function can be found in the IT Management Analysis included in the body of the RIPEC Report.

Transportation Services

The Transportation function has 65.0 FTE positions allocated to it, of which 62.0 FTE positions are bus drivers and bus aides. The total personnel budget to support the costs of this staffing level totals $3.3 million, of which $2.3 million is salaries (70.6 percent) and $1.0 million (29.4 percent) is benefits.

Central Business Office - Transportation

Position	FTE	Salary	Benefits	Total	Cost/FTE
Professional	1.0	$75,282	$19,199	$94,481	$94,481
Clerical	2.0	77,035	32,773	109,808	54,904
Other	62.0	2,140,358	900,863	3,041,221	49,052
Total	**65.0**	**$2,292,675**	**$952,835**	**$3,245,510**	**$49,931**

Source: Warwick School Department data (2006) and RIPEC Calculations

The bus drivers and bus aids represent the majority of this office, with 62.0 of the 65.0 FTE positions allocated for their positions. Slightly more than $3.0 million of the $3.3 million transportation function's personnel costs is related to their salaries and benefits. The average cost per bus driver and aid position is $49,052. For the 2.0 clerical FTE positions, the average cost per FTE is $54,904, which is 1.4 percent more than the average cost per FTE clerical staff for the entire Central Office. The $94,481 in compensation for the Transportation Manager is 5.1 percent higher than the average cost per professional FTE position in the Central Office.

RIPEC Observations and Recommendations

RIPEC was asked to review the central administrative function of the Warwick School Department. RIPEC focused most of its attention on the operations of the Central Business Office (CBO), and has reviewed similar activities performed by the City to see if there were potential savings while maintaining quality back-office services to the school district and City. The services provided by the CBO have to be considered in the overall context of the financial situation the district is currently facing. As outlined in the five-year financial forecast earlier in this report, the school district's operating budget does not include any expenditure associated with additional costs for contract provisions.

RIPEC projections show significant obligations once a new teacher contract is put in place. This will require immediate attention, and current resources are not sufficient to meet this liability. In addition, should the school committee and union reach agreement, the impact could range from approximately $9.3 million in FY 2007 per the proposal outlined by the school committee to $13.2 million in FY 2007 as currently outlined by the union proposal. These estimates are net of the retro-payments for compensation related to previous fiscal years noted above. These forecasts would be in addition to the projections noted above in the financial analysis section of this RIPEC Study. Therefore, this would require service and spending reductions and/or additional resources in order to maintain balanced budgets.

It is in this light that the recommendations below are presented. They are intended to both reduce operations costs and improve overall efficiency in the school department, which will only better position the school department to meet their long-term financial needs to support the nearly 12,000 students in the school system.

The bottom line of the analysis was that there appears to be significant opportunities to share staff and services between the School Department and the City Administration to conduct a range of back-office services, to include purchasing, accounting functions, information technology and perhaps facilities. Within the Central Administrative function of the School Department, there appears to be an over-reliance on clerical staff to conduct work that should require fewer staff. The School Department should still maintain its personnel and budget development functions.

To begin exploring the potential for consolidating services, the City and School Department should jointly pursue independent position analyses to evaluate current job duties and staff skills, conduct a salary survey of the positions that would be brought together, and review existing contract provisions to coordinate staffing adjustments as the functions move towards consolidation. The City and School Department should also establish FTE position targets in light of these analyses to manage the staffing levels down to encourage permanent savings. The following RIPEC recommendations do not suggest layoffs. Rather, as the School District and the City Administration explore how to combine resources, an attrition model managed by specific FTE targets over time will yield significant savings for the City and the School District. In addition, some of the positions that are moved to consolidate functions may actually acquire additional duties, and therefore may require salary adjustments to accommodate increased workload.

Pursue Central Pooling of Existing Clerical Staff Across Functions

There are currently 28.0 FTE positions in the Central Administrative Office that are clerical in nature. These positions support human resources, business operations, special services and athletics.

Central Administration Office

Clerical Staff Summary

Office	FTE	Salary	Benefits	Total
Controller Office	7.0	$290,674	$86,278	$376,952
Purchasing Office	7.0	280,128	106,480	386,608
Transportation	2.0	77,035	32,773	109,808
Human Resources	7.0	273,803	107,014	380,817
Physical Education	1.5	51,165	18,657	69,822
Special Services	3.0	116,798	34,537	151,335
Superintendent	0.5	30,106	11,295	41,401
Total	28.0	$1,119,709	$397,034	$1,516,743
Average Cost		$39,990	$14,180	$54,169

Source: RIPEC Calculations based on Warwick School Personnel Data (2006)

As the table above shows, the total cost of the clerical staff is estimated at $1.5 million, of which $1.1 million is in salary and $400,000 is in benefits. The average salary of a clerk in the Central Administration Office is $39,990, the average cost of direct benefits is $14,180, and the total average cost per clerical position is $54,170.

The extensive use of clerical staff in the central office is an area that may present itself with potential efficiencies on a go-forward basis. Given their proximity and similar job duties as described in sampled job descriptions, there is an opportunity to move towards a central pool of clerk staff to be shared among the different divisions, particularly between the CBO and other divisions within the Central Administrative Office. Therefore, the central administration should pursue a strategy to develop a central clerk pool and develop policies on how work is allocated among the staff. Given this will maximize the skills available throughout the central office and improve productivity, there will be future savings by reducing the number of total clerk positions necessary to perform clerical duties in the near future through an attrition model. As positions become vacant, they should remain unfilled based on established FTE targets to determine the impact of redistributing the workload among remaining clerical staff.

There are an additional 8.0 FTE positions related to secretarial positions in the Office. As the table below shows, the total cost of the secretarial staff is estimated at $489,000, of which $385,000 is in salary and $104,000 is in benefits. The average salary of a secretary in the Central Administration Office is $48,150, the average cost of direct benefits is $13,000, and the total average cost per clerical position is $61,130.

While this is consistent with other office structures in municipal government, it is important to continue to track these positions as they become vacant. The Superintendent's Office has 4.0 FTE positions allocated to secretarial support for four professional positions. There is already some pooling of these resources, and further integration may enable to share a smaller pool of secretarial staff in the future.

Central Administration Office

Secretarial Staff

Position	FTE	Salary	Benefits	Total
Superintendent	4.0	$194,720	$52,630	$247,350
Human Resources	1.0	47,655	17,086	64,741
Business Office	1.0	45,475	8,906	54,381
Special Services	2.0	97,289	25,296	122,585
Total	8.0	$385,139	$103,918	$489,057
Average Cost		$48,142	$12,990	$61,132

Source: RIPEC Calculations based on Warwick School Personnel Data (2006)

Consolidate Controller Function with Sister Functions in City Administration

The City's Treasurer's Office is responsible for the overall accounting operations of the City, develops the standard operating procedures for the annual audit, cash management and all fund relationships. Its Comprehensive Annual Financial Report has received recognition by the GFOA (Government Finance Officers Association). It is well versed in preparing and maintaining its financial statements and its overall financial reporting systems for the City.

The School Department maintains a separate accounting system, where it pays its own bills, develops its own payroll, and runs its own checks. The School District's Controller is responsible for the daily maintenance of the School district's accounting system, such as creating new and eliminating old accounts and posting transactions. The School Department's Controller's Office sends over warrants for payroll and accounts payable and the City wires the appropriate funds to the School Department's accounts. In other words, the City funds the School Department's obligations as they are incurred.

The strength of the City's treasury function is its ongoing efforts to meet the annual requirements of audit reporting and maintaining an accounting system on a GAAP basis. The Treasurer's Office is also responsible for the preparation of financial statements, cash reconciliation, as well as the calculation of amortization schedules. This environment presents itself with an opportunity to build on these assets and to enhance the same function currently provided within the School Department.

The School Department's Controller Office is made up of 11.0 FTE positions, to include the Controller, 3.0 FTE positions (accountants), and 7.0 FTE clerical positions. The total personnel budget for the control function is $646,525, of which $269,600 (41.7 percent)

is allocated to support the professional staff and $377,000 (58.3 percent) is to support the 7.0 support staff. Of the $646,525 in personnel expenditures, $498,600 is for wages and salaries and the $147,930 balance is for benefits received.

Treasury/Controller

School Department	FTE	Salary	Benefits	Total	Cost/FTE
Professional	4.0	$207,920	$61,653	$269,573	$67,393
Clerical	7.0	290,674	86,278	376,952	53,850
Total	*11.0*	*$498,594*	*$147,931*	*$646,525*	*$58,775*
City Administration	**FTE**	**Salary**	**Benefits**	**Total**	**Cost/FTE**
Professional	4.0	$242,361	$72,708	$315,069	$78,767
Clerical	3.0	113,550	34,065	147,615	49,205
Total	*7.0*	*$355,911*	*$106,773*	*$462,684*	*$66,098*

Source: RIPEC Calculations, City and School Department Personnel Data (2006)

The City's Treasurer's Office has 7.0 FTE positions to support its function, led by the Treasurer. There are 4.0 FTE positions that are professional in nature and 3.0 FTE positions that are clerical. The clerical staff performs various functions within the Treasurer's Office, including payroll, accounts payable and reconciliation activities. The City's total personnel budget for the Treasurer's Office is $462,700, of which $315,100 supports professional staff and $147,600 supports the clerical staff. Of the $462,700 in personnel expenditures, $355,900 (76.9 percent) is for wages and salaries and the $106,800 (23.1 percent) balance is for benefits.

The average cost per FTE position in the City's Treasurer's Office - $66,098 - is 12.5 percent higher than the School Department's controller function ($58,775). This is in part driven by the School Department's heavier reliance on clerical staff. The school Department's clerical staff has an average cost per FTE position of $53,850, which is 9.4 percent higher than the average cost per clerical FTE position in the City's Treasurer's Office ($49,205).

Again, the controller function is not necessarily a function that is education-specific. In other words, the function itself is fairly common regardless of the entity being served. Given that both the City and the School Department operate similar functions, there is some duplication of work (such as two independent accounting systems) between the School Department and the City Administration. Therefore, consideration should be given to consolidating the two functions, and both entities would best be served if it were under the City Treasurer function. This will permit the kind of synergies to take place to achieve savings, maintain efficient services, and eliminate duplicative activities. Again, the City must take a proactive role in ensuring that it is responsive to the school district's needs on a timely basis.

As part of a consolidation initiative, the staffing and funding for the positions currently within the school district should be moved to the City. The City should not lay-off any positions that are part of the consolidation. The Management Letter included in the annual audit of financial statements for fiscal year ending June 30, 2005 includes recommendations that are designed to enhance the staff of City's Treasurer's Office. The consolidation of the two functions into the City will permit existing resources to supplement the City's staff to provide the necessary support for the daily financial reporting duties of the office. As positions become vacant, they should remain unfilled to determine the impact of redistributing the workload among current remaining staff.

Implement Common FMIS System for Both School District and City Administration
As part of the initiative to consolidate the two controller functions into the City Administration, the School Department and the City should work towards a unified Financial Management Information System (FMIS). The information technology analysis included in this RIPEC Study concluded that as the School District's CBO considers upgrading its Financial Management Information System (FMIS), it should be developed in the context of the current MUNIS system currently operated by the City.

An example of the impact of operating two independent accounting systems is the issue of reconciliation. In the June 30, 2005 Management Letter prepared in concert with the Financial Statements for the City, there are some issues relating to the Controller's office policies and its accounting system. Because the School's accounting system is independent of the City's accounting system, an additional layer of monitoring and adjustments are necessary to effectively reconcile between City and School District accounting systems – particularly at year's end. The School Department must review all transactions even though they are managed by the City on behalf of the school. It is often the case that there is a series of adjustments at year end, and that the due to and due from accounts do not agree between the City and the School Department. The School Department maintains their books on a budgetary basis rather than the GAAP basis as currently practiced by the City. The School Department's accounting system currently in place does not produce a useable balance sheet by account – an integrated GAAP general ledger accounting system would. Therefore, the School Department generates its trial balance through Excel.

In developing a strategy to unify the FMIS systems under one program, it is essential that appropriate policies and procedures be put in place to ensure the integrity of the system is maintained. This will require appropriate methods of data entry, data verification and staff training.

Given both the purchasing and controller functions will rely heavily on this new system, the School District and City Administration should would both benefit from maintaining a common FMIS system. This could serve as a catalyst for the consolidation of the two functions. In fact, this would prove valuable to both entities going forward given much of the current practice of sharing information is essentially manual. In addition, there would be cost savings in licensing, updating and maintaining the system, as well as IT

staffing in the future. The unified FMIS system could also lead to a smoother transition to a pooled purchasing and controller function for both the District and the City.

Consolidate Purchasing Function with Sister Function in City Administration
The School Department's purchasing function is responsible for developing and issuing requests for proposals per current bid requirements as outlined in the school district's purchasing manual, monitoring and tracking purchase orders, and ensuring inventories are received.

All of the School District's operating, grant and capital project items are processed through a requisition and purchase order system. Purchases are initiated through a requisition, which is checked against the budget availability and "flags" those where funds are not available. A purchase order is then created and when the goods and/or services are received, the purchase order is signed and forwarded to the Business Office.

The invoice is then reviewed for accuracy and then entered into the accounts payable system and a payment voucher is prepared. A warrant and supporting documentation are prepared and submitted to the Clerk of the School Committee for approval. Checks are cut once a week and sent to City Hall to be signed by the Treasurer. All checks are drawn on a City account – the City makes the appropriate inter-fund entries to cover the incurred expense. The School Department's purchasing function is paper-driven as opposed to the City's purchasing function, which is primarily technology-driven.

Purchasing

School Department	FTE	Salary	Benefits	Total	Cost/FTE
Professional	1.0	$64,673	$17,018	$81,691	$81,691
Clerical	7.0	280,128	106,480	386,608	55,230
Total	*8.0*	*$344,801*	*$123,498*	*$468,299*	*$58,537*
City Administration	**FTE**	**Salary**	**Benefits**	**Total**	**Cost/FTE**
Professional	2.0	$116,995	$35,099	$152,094	$76,047
Clerical	3.0	109,577	32,873	142,450	47,483
Total	*5.0*	*$226,572*	*$67,972*	*$294,544*	*$58,909*

Source: RIPEC Calculations, City and School Department Personnel Data (2006)

There are 8.0 FTE positions to support its function, led by the Purchasing Manager. The balance of the staffing includes a range of clerks performing various functions within purchasing, such as accounts payable and purchase order reviews. The total personnel budget for the purchasing function is $468,300, of which $81,691 is to support the Manager and $386,600 is to support the 7.0 support staff. Of the $468,300 in personnel expenditures, $344,800 (73.6 percent) is for wages and salaries and the $123,500 (26.4 percent) balance is for benefits.

The City's purchasing division has 5.0 FTE positions to support its function, led by the Purchasing Agent. There are 2.0 FTE positions that are professional in nature and 3.0 FTE positions that are clerical. The clerical staff performs various functions within purchasing, such as accounts payable, bid development and general office staff work. The City's total personnel budget for the purchasing function is $294,550, of which $152,100 supports professional staff and $142,450 supports the clerical staff. Of the $294,550 in personnel expenditures, $226,600 (76.9 percent) is for wages and salaries and the $68,000 (23.1 percent) balance is for benefits.

Overall, the average cost per FTE position is very similar when comparing the two offices - $58,537 in the School Department's purchasing function as compared to $58,909 in the City purchasing department. The school department's clerical staff has an average cost per FTE position of $55,230, which is 16.3 percent higher than the average cost per clerical FTE position in the City's purchasing shop ($47,483).

The purchasing function is not necessarily a function that is education-specific. In other words, the function itself is fairly common regardless of the entity being served. However, the heavy reliance on paper-driven purchasing procedures in the School Department results in a cumbersome process. On the other hand, the City's purchasing procedures are more technology-driven, requiring less staff to manage similar valumes of workload. Given that both the City and the School Department operate similar functions, there is some duplication of work between the School Department and the City Administration.

Therefore, consideration should be given to consolidating the two functions, and both entities would best be served if it were under the City technology-driven function. This will permit the kind of synergies to take place to achieve savings, maintain efficient services, and eliminate duplicative activities.

As part of a consolidation initiative, the staffing and funding for the positions currently within the school district should be moved to the City. The City should not lay-off any positions that are part of the consolidation. Rather, as positions are vacated, they should remain unfilled to determine the impact of redistributing the workload among current remaining staff. Other purchasing needs and functions might also be considered within the City's purchasing office as well.

If the City and School Department do purse this recommendation, it is incumbent on the City to take a proactive role in ensuring that it is responsive to the school district's needs on a timely basis. This may require updating policies and procedures to ensure the School Committee continues to play the ministerial role over the school department's overall financial decisions and policies.

Evaluate establishing a unified IT function with the City and the School Department.
The City and the School Department should consider combining Information Technology resources. With similar initiatives planned by both entities, a unified plan may drive down costs and provide the City and School Department with a more efficient, cost-effective and robust IT infrastructure that neither entity could afford individually.

The School Department's IT Office is made up of 11.0 FTE positions – all considered professional positions for the purpose of this analysis. The total IT personnel budget is $646,209, of which $534,550 is for wages and salaries and the $111,700 balance is for benefits received.

Information Technology

School Department	FTE	Salary	Benefits	Total	Cost/FTE
Professional	11.0	$534,543	$111,666	$646,209	$58,746
Clerical	0.0	0	0	0	-
Total	*11.0*	*$534,543*	*$111,666*	*$646,209*	*$58,746*

City Administration	FTE	Salary	Benefits	Total	Cost/FTE
Professional	7.0	$395,249	$118,575	$513,824	$73,403
Clerical	2.0	78,733	23,620	102,353	51,176
Total	*9.0*	*$473,982*	*$142,195*	*$616,177*	*$68,464*

Source: RIPEC Calculations, City and School Department Personnel Data (2006)

The City's IT Office has 9.0 FTE positions to support its function. The City's total IT personnel budget is $616,200, of which $474,000 is for wages and salaries and the $142,200 balance is for benefits. The average cost per FTE position in the City's IT Office - $68,500 - is 16.5 percent higher than the School Department's IT function ($58,746).

The discussion above regarding the FMIS systems is an example of how bringing resources together can result in savings and efficiencies. The City and the School Department may further increase productivity and efficiency by integrating resources. Although the technology usage is different for each entity, there are fundamental technologies that are similar, such as networking, Server Operating System support, and Desktop support. By integrating some of the tasks of the teams, the City and the School Department may utilize additional resources to increase support time and may reduce out-source maintenance contracts.

Explore Consolidating Facilities Management Functions with City Administration
Within Warwick's total FY 2005 operations expenditures for the school district, facilities accounted for about half of the expenditures. Expenditures increased on average annually by 3.4 percent, from $11.3 million in FY 2001 to $12.9 million in FY 2005. Expenditures for facilities accounted for the greatest share of growth in total operation expenditures. In other words, the majority of the growth within total operations in Warwick came from increased expenditures to upkeep facilities. Warwick spends $1,082 per pupil to support facilities – the highest per pupil expenditure for facilities among the peer school districts in the benchmarking study. Warwick's spending was 20.2 percent higher than the next highest school district (East Providence at $900 per pupil).

The review of facilities in detail was beyond the scope of this work, but as other work was performed, the data suggested that this may prove to be a valuable analysis to have completed given the potential efficiencies that may result from such an action. There are considerable resources allocated to support facilities, and an initial scan of personnel data shows staffing levels in excess of 150.0 FTE positions allocated for facilities maintenance.

Prepare an Employee Handbook
The Warwick School Department currently does not have an employee handbook. A comprehensive employee handbook (or personnel manual) should be developed and distributed to all School District Employees. Distribution of such a document could be handled via the School District's web-site or through a mass email distribution. Hard copies should be available upon request and maintained in the human resources division. The handbook should include a description of the school district's organization as well as individual department organization.

The School District has organizational charts that outline the structure and span of control for the Central Office. These should also be included in the manual. In addition, the manual should provide policies and procedures concerning employee relations (such as supervisory responsibilities, standards of conduct, hours of work, etc), employment, selection and orientation, wage and salary administration and employee benefits. It is true that labor contract provide much of this information, but one should not rely on the detailed nature of labor contracts to ensure all employees understand the policies and procedures in place. An employee handbook provides an opportunity to outline a wide range of policies that may not be easily derived from a contract or not included in a contract.

Appendix