

## ATE Needs in the Wasatch Front South Region

The Wasatch Front South Applied Technology Center was created during the 1999 Legislative Session to coordinate applied technology education among the five school districts in Salt Lake and Tooele counties (Granite, Jordan, Murray, Salt Lake, and Tooele). Intent language adopted during the 1999 Legislative Session directed the Legislative Fiscal Analyst to prepare an assessment of the need for a stand-alone facility to serve the Wasatch Front South Service Region. During the legislative session, the Analyst expressed concern that a report prepared for the Wasatch Front South board of directors lacked reliability and that other factors needed to be considered in determining the viability of a stand-alone applied technology center in Salt Lake County. This report provides an analysis of the facility request prepared for the Building Board by the Wasatch Front South Applied Technology Center (WFSATC) and also analyzes Applied Technology Education in the Region, offering an opinion as to the need for a stand alone applied technology center in Salt Lake County.

## Facility Cost Estimates

In their request to the Building Board, the State Office of Education estimated the cost of the 100,000 square foot facility to be \$19,900,000. The five districts served by the WFSATC have pledged \$5.5 million and another \$750,000 has been identified by the USOE. The total request for funding is \$13,650,000.

	USOE Estimate	LFA Estimate	Difference
Utilities (Tooele)		\$500,000	\$500,000
Land (Salt Lake)	\$6,011,280	12,523,500	6,512,220
Land (Tooele)	686,070	980,100	294,030
Facility	12,500,000	10,000,000	(2,500,000)
Equipment	700,000	1,119,000	419,000
School Districts	(5,500,000)	(5,500,000)	-
USOE	(750,000)	(750,000)	-
<b>State Funds</b>	<b>\$13,647,350</b>	<b>\$18,872,600</b>	<b>\$5,225,250</b>

**Table 1: Estimated Costs for WFATC Facility**

The Analyst makes the following observations regarding the USOE estimates:

**Utilities** – Available land in Tooele County is not likely to have availability for full sewer, water, gas and electrical needs;

**Facility Cost** – If the space is built to be open, flexible, warehouse style space, it can be completed for around \$100 per square foot rather than the USOE’s \$125 estimate;

**Land** – The USOE estimate only accounts for 12 of the 25 acres it wants to purchase for the full development. The land must be purchased all at once – it is not likely that the State will be able to phase the purchase unless the State also purchases an option on the additional 13 acres.

USOE estimates for land costs appear to be overly optimistic. DFCM estimates that the land will cost \$15 per foot rather than the \$11.50 per foot that the USOE estimates. DFCM’s estimate would add an additional \$4 million to the purchase price. Also, DFCM estimates land to be \$.45 per foot higher than USOE estimates in Tooele County (The USOE estimates \$1.05) – in attempting to allow for as conservative an estimate as possible, the Analyst’s estimate uses USOE figures for land in Salt Lake and DFCM’s estimate for land in Tooele County;

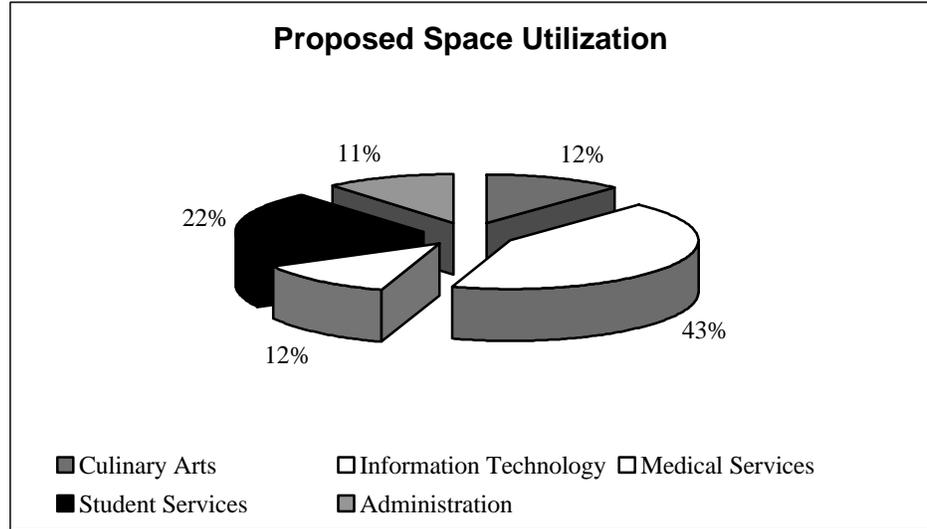
**Equipment** – The USOE estimate is extremely optimistic. The programs housed in ATCs require very expensive equipment. Even with a conservative estimate, the cost for the IT equipment exceeds \$700,000 on its own. The cost for classroom equipment, office furnishings and administrative equipment will only push the total higher.

<b>LFA Equipment Estimate</b>	<b>\$1,119,000</b>
Culinary Equipment	200,000
Medical Furnishings	200,000
IT Equipment	719,000
<i>350 Computers</i>	<i>525,000</i>
<i>Licenses</i>	<i>44,800</i>
<i>Distance Ed Classroom</i>	<i>40,000</i>
<i>5 Projectors</i>	<i>25,000</i>
<i>Networking</i>	<i>35,000</i>
<i>2 Servers</i>	<i>34,000</i>
<i>Switch</i>	<i>1,700</i>
<i>15 Hubs</i>	<i>13,500</i>

**Table 2 : Estimated Equipment Costs**

## Space Utilization

Although there is still some question as to what programs will be offered and how much they will cost, the WFSATC plans to offer programs in Culinary Arts, Information Technology and Medical Services. These programs will occupy approximately two-thirds of the requested space with the rest of the space dedicated to administration and student services.



**Figure 1: Proposed Space Utilization**

## Program Costs

The WFSATC estimates 1700 students (headcount) will attend the ATC the first year it is open, rising to 3,000 students in its fourth year. Assuming a direct instructional cost of \$3,000 per student over those four years, the annual cost is estimated to be as follows:

Year	Enrollment	Estimated Annual Cost	New Annual Funds
1	1700	\$5,100,000	\$5,100,000
2	2050	\$6,150,000	\$1,050,000
3	2500	\$7,500,000	\$1,350,000
4	3000	\$9,000,000	\$1,500,000

**Table 3: Ongoing Costs**

## Future Cost Estimates

The Legislative Fiscal Analyst estimates that the cost to the state to construct a new building for WFSATC will exceed \$18.8 million. The WFSATC request is for phase one of a project that will see three more buildings constructed in Salt Lake County and another in Tooele County. Annual programmatic costs will exceed \$5 million in the first year and O&M costs will be nearly \$500,000 more for the first phase.

It is important to note that the above costs reflect only the land purchases and first phase of the project. The concept calls for three more facilities of 50,000 square feet each. Assuming a conservative construction inflation rate of five percent, no additional funds for equipment and an aggressive plan that approves a new facility every two years, the State could expect to spend another \$18 million to complete construction. Delays in construction would drive the price of the additional phases even higher.

<b>Facility Cost</b>	<b>LFA Estimate</b>
Utilities (Tooele)	-
Land (Salt Lake)	-
Land (Tooele)	-
Phase II	5,512,500
Phase III	6,077,531
Phase IV	6,700,478
School Districts	-
USOE	-
<b>State Funds</b>	<b><u><u>\$18,290,509</u></u></b>

**Table 4: Cost Estimates for Phases II-IV**

As the size of the facility grows, the need for ongoing funds also increases. An additional 150,000 square feet will bring added costs of \$675,000 just for operation and maintenance. Programmatic costs could easily exceed \$13 million per year in only the sixth year of operation when the WFS board estimates that 4,440 students will be on campus.

<b>O&amp;M</b>		<b>Programmatic</b>	
Phase II	\$225,000	Phase II	\$7,500,000
Phase III	225,000	Phase III	3,450,000
Phase IV	225,000	Phase IV	2,370,000
<b>Ongoing Funds</b>	<b><u><u>\$675,000</u></u></b>	<b>Ongoing Funds</b>	<b><u><u>\$13,320,000</u></u></b>

**Table 5: Ongoing Funds for Phases II-IV**

**ATE Enrollment in the WFS Region**

*WFS Enrollment is Similar to Other Regions*

The Wasatch Front South Applied Technology Center (WFSATC) is requesting a new facility to serve Salt Lake and Tooele County. The WFSATC Board believes that the region is under-served in relation to Applied Technology Education (ATE). The table below shows the relationship between the five school districts served by the WFSATC and state totals for enrollment, hours taught within the school district and hours received from any ATE source.

<i>1997-98 School Year</i>	<b>Statewide</b>	<b>WFS Region</b>	<b>WFS %</b>
High School Enrollment	149,227	57,314	38.4%
District ATE Hours	27,587,475	10,402,127	37.7%
All Secondary ATE Hours	30,866,178	10,681,989	34.6%
Average Daily Membership	22,359.161	8,086.983	36.2%

**Table 6: Statewide vs. WFS Region**

*Several Agencies  
Provide Applied  
Technology  
Education*

Applied Technology Education is offered not only by the State Office of Education, but also by local districts and the Utah System of Higher Education. The following table provides data on the amount of instruction delivered to public school students and the comparative measure for college students taking credit-bearing ATE courses. It does not include non-credit courses provided by the USHE or the adult students served by USOE ATCs and ATCSRs.

<i>Public Education</i>	<i>Total Hours</i>	<i>ATC/ATCSR</i>	
		<i>Hours</i>	<i>ATC %</i>
Wasatch Front South ATCSR	10,341,880	223,288	2.2%
Mountainland ATCSR	5,860,403	162,999	2.8%
Davis ATC	4,043,412	456,316	11.3%
Ogden Weber ATC	3,427,390	332,620	9.7%
Southwest ATCSR	1,748,458	89,722	5.1%
Bridgerland ATC	1,405,905	410,765	29.2%
Sevier Valley ATC	1,158,644	181,154	15.6%
Southeast ATCSR	952,025	51,060	5.4%
Uintah Basin ATC	721,428	202,286	28.0%
<b>Total ATE Hours - Public Ed</b>	<b>29,659,545</b>	<b>2,110,210</b>	<b>7.1%</b>
<i>Higher Education</i>	<i>Total Hours</i>	<i>FTE</i>	<i>% of Total</i>
Utah State University	409,464	517	3.8%
Weber State University	1,586,376	2,003	14.7%
Southern Utah University	568,656	718	5.3%
Snow College	335,016	423	3.1%
Dixie College	658,152	831	6.1%
College of Eastern Utah	536,976	678	5.0%
Utah Valley State College	2,406,888	3,039	22.3%
Salt Lake Community College	4,293,432	5,421	39.8%
<b>Total ATE Hours - Higher Ed</b>	<b>10,794,960</b>	<b>13,630</b>	<b>100.0%</b>

**Table 7: ATE by Region and Institution (1996-97)**

## **ATE Needs in the Wasatch Front South Region**

Too often, the term *applied technology center* is used interchangeably with the term *applied technology education*. The Legislature has been a consistent supporter of applied technology education, providing resources for local school districts, the State Board of Education and the State Board of Regents. The consistent goal of the Legislature has been to provide high quality training in a properly equipped setting while avoiding costly duplication of programs. This goal should be considered especially significant in considering applied technology needs in Salt Lake and Tooele Counties. The Analyst believes that four key areas are critical to understand the needs of students in the Wasatch Front South service region:

1. The nature of applied technology education;
2. The programs offered along the Wasatch Front;
3. Roles and missions of education stakeholders; and,
4. Levels of funding and enrollment within the Wasatch Front South Service Region.

## **The Nature of ATE**

Applied Technology Education is offered through three primary organizations in the State of Utah: individual school districts; state run applied technology centers and service regions; and eight individual colleges and universities. The configuration of service providers varies from region to region. In the Bridgerland Service Region of Cache Valley, the Utah State Office of Education is the primary provider of ATE credit through the Bridgerland Applied Technology Center. In the Southwest Region of the State, Dixie College and Southern Utah University provide about half of all ATE credit while the majority of the remaining hours are generated by the Iron and Washington County school districts. While there is no one way to organize ATE program delivery, the mission of all providers is to uphold the essential elements of applied technology education:

### *ATE Defined*

Applied technology education (ATE) means organized educational programs or competencies which directly or indirectly prepare persons for employment, or for additional preparation leading to employment, in occupations where other than a baccalaureate or advanced degree is required for entry. These occupational categories include agriculture; business; family and consumer sciences; health science and technology; marketing; trade, technical and industrial education; and technology education. This definition includes integrated and applied academic programs or competencies. (USOE Rule R277-914-1(D): Definitions.)

*ATE is a program,  
not a facility*

As the above rule notes, applied technology is an “organized educational program” – a curriculum designed to “prepare persons for employment, or for additional preparation leading to employment.” This curriculum is independent of the facility or organization that delivers the program. The debate regarding the need for an ATC in Salt Lake County blurs the line between applied technology education and an applied technology center. One of the primary flaws in the Ohio State Study commissioned by the State Office of Education is that it focused on the lack of a state operated facility in finding a need for additional applied technology centers (The Center on Education and Training for Employment: *Applied Technology Education/Training Needs and Delivery Strategies in the Wasatch Front South Service Area*, 1998). The study would have been more valid if the researchers had taken into account all applied technology education provided in the Wasatch Front South Service Region.

It is clear that applied technology education is vital to the future of Utah. However, the Analyst believes the state should not assume that the only way to provide ATE is through a stand-alone applied technology center. Two other major metropolitan areas in the Intermountain West have addressed ATE needs from a curriculum standpoint. Both Clark County, Nevada and Phoenix, Arizona developed unique programs to address the needs of both students and adults in delivering applied technology education.

*Cooperation in  
Southern Nevada*

Clark County (Las Vegas) is home to the Community College of Southern Nevada (CCSN). Public school districts entered into a partnership with CCSN to share facilities in a way that enhanced the missions of each entity. Public school districts operate a high school on three CCSN campuses, allowing students to get a jump-start on college or vocational programs. In all, 700 students attend high school on a college campus. CCSN also maintains facilities on high school campuses around the Las Vegas area. As part of its commitment to the school districts, the community college builds high tech facilities on high school campuses. The facilities include several high tech classrooms and a large computer lab that are used by the high school during the day. In the evening, both the high tech facility and the high school are used by the community college to deliver courses throughout the county.

*Cooperation in  
Arizona*

In Arizona, the legislature created special taxing districts to provide applied technology training. The “Joint Technological Education Districts” (AZ ST s 15- 391-396) can be formed following a needs study involving two or more districts and upon approval of voters within each district. The East Valley Institute of Technology (EVIT) is a JTE District in the Phoenix Area that overlays ten school districts and draws students from across the metropolitan area. EVIT relies on the tax base of its area to provide operating costs and bonding authority for capital development. Programs, driven by employment opportunities, range from criminal justice and fire training to the most advanced technologies in computerized animation.

The Legislative Fiscal Analyst believes that school districts, applied technology centers, the State Office of Education and the Utah System of Higher Education must ensure that all existing resources are efficiently shared before new construction is undertaken.

**ATE Programs**

*FY 2000 ATE funding increased despite declining enrollment*

Students must take at least one course in applied technology education in order to graduate from a Utah public high school. Realizing that traditional applied technology education courses often involve the procurement of expensive equipment and tools, the Legislature annually provides an ATE “add-on” that is administered by the State Office of Education.

	<b>FY 1999</b>	<b>FY 2000</b>	<b>% Change</b>
Estimated WPU's	995	989	-0.60%
ATE Set Aside	\$1,844,730	\$1,880,089	1.92%
<b>Total ATE Add-On</b>	<b>\$38,142,342</b>	<b>\$38,882,142</b>	<b>1.94%</b>
Set Aside Per WPU	\$1,854	\$1,901	2.54%

**Table 8: State ATE Funding**

Even though the total number of students taking ATE classes declined from FY 1999 to FY 2000, the Legislature increased the total amount of funds available for add-ons by nearly two percent. Each school district receives a base amount for ATE add-on and the remaining funds are distributed by number of credit hours generated.

*Some programs may not reflect traditional ATE missions.*

The purpose of add-on funds is to offset the costs of more expensive courses that are part of the ATE curriculum, but some courses that are counted as ATE credit appear to be no more expensive to operate than traditional academic programs. The following table provides examples of “traditional” ATE courses (those that require specialized equipment) and “academic” ATE courses (those that appear to be taught in a standard classroom setting).

"Academic" ATE Courses	"Traditional" ATE Courses
Entrepreneurship	Agriculture and Business Mgmt
Economics	Farm and Ranch Mgmt
Retailing	Advanced Agricultural Mechanics
Marketing	Veterinary Asst.
Adult Roles and Responsibilities	Dairy Herd Mgmt
Food and Fitness	Culinary Arts
Life Management	Integrated Shop Program
Food for Life	Electrician
Teen Living	Automotive Technician
Career Exploration	Automotive Collision Repair
All About Business	Welding Technician
Business Management	Cabinet Making
Accounting I-IV	Computer Applications
Keyboarding	Drafting
Information Processing	Desktop Publishing
Banking and Finance	Commercial Art

**Table 9: ATE Programs**

Each of the courses on this list are legitimate courses for the high school curriculum. However, there may be some mis-classification that does not meet the spirit of the ATE credit requirement. If the goal of the State is to broaden a student’s academic experience by including trades and skills in the technology arena, ATE courses such as those listed in the “academic” list above allow students to graduate without truly getting a feel for traditional ATE programs. Furthermore, funding for the more expensive ATE programs is designed to offset the cost of equipment. If some school districts are receiving additional funding for students in “Teen Living” (2347 enrollees in the Granite District), other schools may be shortchanged for students enrolled in equipment-intensive programs.

**Analyst Recommendation: Add-on funds should be used for high cost programs**

The Legislative Fiscal Analyst recommends that funds designated for ATE add-on should be reserved for traditional ATE programs that bear an increased cost for specialized equipment. The Analyst also believes that the State Office of Education should re-examine classifications of ATE programs to ensure that students are receiving as broad an education as possible.

## Roles and Missions of Education Stakeholders

Economists and philosophers from Hobbes and Rousseau to Dewey and Friedman have accepted the concept of education as a public good. Few would argue against the notion that every Utah citizen is a stakeholder in the educational process. From the perspective of the State, there are two primary agencies that are crucial to the educational process. The Utah System of Higher Education (USHE) and the Utah State Office of Education (USOE) have distinct, overlapping and sometimes competing missions in providing education to the citizens of the State. The Legislature defined the role of the USHE in 1991 by requiring the Board of Regents:

- 1) to provide a high quality, efficient, and economical public system of higher education through centralized direction and master planning which:
  - a) avoids unnecessary duplication;
  - b) provides for the systematic and orderly development of facilities and quality programs;
  - c) provides for coordination and consolidation; and
  - d) provides for systematic development of the role or roles of each institution within the system of higher education consistent with the historical heritage and tradition of each institution; (UCA 53B-1-101).

*Both the USHE and USOE are mandated to avoid program duplication*

The following year, the Legislature clearly defined the role of Public Education:

The Legislature recognizes that public education's mission is to assure Utah the best educated citizenry in the world and each individual the training to succeed in a global society, by providing students with learning and occupational skills, character development, literacy, and basic knowledge through a responsive educational system that guarantees local school communities autonomy, flexibility, and client choice, while holding them accountable for results (UCA 53A-1a-103).

While each part of Utah's education code clearly mandates the roles and missions of both education agencies, it does not clearly define who the client is for either the USHE or the USOE. As a result, funding has generally followed the student to the campus. High school students enrolled in an institution of Higher Education enhance the funding of the institution that they attend while adults enrolled in ATCs operated by public education cause funding to flow to the USOE. Perhaps most importantly, this pattern of funding may result in the USHE and the USOE competing for students by offering similar programs within the same service area. Each agency is required by code to avoid "unnecessary duplication" – the USHE in the citation above and the USOE under the guidance of the State Board of Education (UCA 53A-1-401(4)).

*Joint Liaison  
Committee must  
work to resolve  
funding issues*

Just as businesses compete for customers by offering similar products, the USOE and the USHE are competing for clients in some areas by offering similar courses. The Joint Liaison Committee (JLC), which is made up of industry leaders and representatives of public and higher education, was formed to address the overlapping issues that affect the roles and missions of both agencies in relation to Applied Technology Education. While the JLC has been successful in bringing about a better understanding of shared roles, it has not been able to overcome the funding difficulty that currently exists.

**Recommendation: Funding should be clearly defined**

The Analyst believes that the lack of a clearly defined client for both the USOE and the USHE leads to competition for students and may create unnecessary duplication of programs. The Analyst recommends that the USHE and USOE, through the Joint Liaison Committee, work with the Office of the Legislative Fiscal Analyst to develop a funding formula that eliminates unnecessary duplication.

**ATE Enrollment and Funding in the WFS Region**

The five districts in the WFSATC Service Region serve approximately 38 percent of all high school students in Utah. In the 1997-98 school year, more than 10.5 million hours of ATE training was delivered to high school students in Salt Lake and Tooele Counties. Additionally, Salt Lake Community College provided more than 5 million hours of training – approximately one million hours more than the 4,130,064 hours provided by all ATCs and ATCSRs combined.

<i>Home School District</i>	<i>Hours Generated</i>	<i>9-12 Enrollment</i>	<i>Hours Per Student</i>
Granite School District	4,583,671	23,103	198.40
Jordan School District	4,054,720	22,650	179.02
Tooele School District	413,286	2,478	166.78
Salt Lake School District	1,225,643	6,849	178.95
Murray School District	404,669	2,234	181.14
<b>Total</b>	<b>10,681,989</b>	<b>57,314</b>	<b>186.38</b>
Statewide Totals	30,866,178	149,227	206.84
WFS % 1997-98	34.6%	38.4%	90.1%
	<i>Total Hours</i>	<i>Credit</i>	<i>Non-Credit</i>
<b>SLCC</b>	<b>5,122,780</b>	<b>4,298,976</b>	<b>823,804</b>

**Table 10: High School ATE Hours**

The figures above show that students in the WFS region take fewer ATE hours, on average, than students in the rest of the State. With 38 percent of the 9-12 grade population, the region is producing just under 35 percent of all hours taken by high school students in the state, not counting any hours taken by high school students on the SLCC campus. Although students in the WFS Service Region take fewer ATE hours, it appears that there is sufficient opportunity for students to take courses currently offered by the districts.

*The state will provide nearly \$190 million in ATE Funding this year*

The primary funding vehicle for Public Education is the Minimum School Program. The \$1.7 billion program plus additional funds directed to the Utah State Office of Education make up approximately one-third of all state expenditures and more than 45 percent of all funds expended from state sources. The Applied Technology Education piece of the Minimum School Program exceeds \$38.8 million, which is sent to school districts based on the number of students enrolled in applied technology courses. The five school districts within the Wasatch Front South region will expend nearly as many dollars within the region as the State Office of Education will expend statewide.

*The WFS spends more on ATE than any other region*

In Fiscal Year 1998 (the most recent year with available statewide data), the five school districts within the WFS region accounted for 37.4 percent of all ATE expenditures at the district level. Combined that year, the five school districts, WFSATCSR and Salt Lake Community College totaled \$60.7 million in ATE spending in the Wasatch Front South region. That amount was 32 percent of all ATE expenditures statewide (including the other seven colleges).

<i>District</i>	<i>1997-1998</i>
Granite	\$11,570,373
Jordan	14,327,493
Tooele	2,334,544
Salt Lake	4,738,846
Murray	1,546,814
<b>WFS School District Total</b>	<b>\$34,518,070</b>
<b>Other Districts</b>	<b>\$57,665,538</b>
<b>Statewide Total (Districts Only)</b>	<b>\$92,183,608</b>
<i>WFS Percent of Total</i>	<i>37.44%</i>
SLCC	\$25,720,600
USHE (Not including SLCC)	41,229,600
<b>USHE Total</b>	<b>\$66,950,200</b>
<i>SLCC Percent of Total</i>	<i>38.42%</i>
WFSATCSR	529,600
All ATC Programs (less WFSATCSR)	29,996,100
<b>USOE ATE Total</b>	<b>\$30,525,700</b>
<b>Total WFS Region ATE Expenditure</b>	<b>\$60,768,270</b>
<b>Total State Expenditure</b>	<b>\$189,659,508</b>
<i>WFS Percent of Total</i>	<i>32.04%</i>

**Table 11: ATE Funding Statewide**

Fiscal year 2000 will bring another \$60 million in ATE expenditures for the Wasatch Front South service region. School district figures are base estimates that will likely rise by more than \$1 million as the two largest districts, Granite and Jordan, receive additional federal funds for their programs.

<i>District</i>	<i>1999-2000</i>
Granite	\$14,100,840
Jordan	11,768,067
Tooele	1,334,956
Salt Lake	5,256,224
Murray	1,138,084
<b>School District Total</b>	<b>\$33,598,171</b>
SLCC	\$26,619,100
WFSATCSR	1,022,900
<b>Total WFS Region ATE Expenditure</b>	<b>\$61,240,171</b>

**Table 12: ATE Funding - WFS Region**

### **WFSATC: Facility Request Assessment**

The Analyst believes that applied technology education is a crucial part of ensuring a healthy future for Utah citizens. A global marketplace and increasing technological advances drive the need for more skilled workers in the state. The Legislature continues to offer a substantial commitment to applied technology education statewide, building a strong system that draws on the resources of school districts, the Board of Regents and the State Board of Education. *The Analyst believes that this type of cooperation should be the hallmark of applied technology education in Salt Lake and Tooele counties.* The present underlying assumption seems to be that the only way for ATE programs to expand involves a significant financial commitment from the State to fund a stand alone facility. The Wasatch Front South ATC has a unique opportunity to draw on many resources in this valley that other ATE service regions do not have. Just as educators in Las Vegas and Arizona have learned to be creative in facility development, the WFSATC Board and the State Office of Education should look for alternative methods for operating their programs before they seek the final alternative of a new capital development project. Failing to find sufficient needs analysis and cooperation, the Analyst has three primary concerns with the WFSATC proposal:

1. The proposed target population;
2. The lack of a clearly identified “business plan”;
3. The cost/benefit ratio of building and operating a facility.

## Target Population

*In regions lacking a community college, ATCs serve large adult populations*

When the concept for an ATC was presented to the Legislative Fiscal Analyst in the Summer of 1998, the plan was to build a “small technical center” to serve the unmet needs of high school students in Salt Lake and Tooele Counties. The plan presented to the Building Board in October of this year defines the WFSATC target population as students who have graduated from high school but have not received any formal training – students normally identified as clients of community colleges. Adults account for 60 percent of all hours taken in ATCs around the state.

<i>ATC - FY 1998</i>	<i>Total Hours</i>	<i>Adult Hours</i>	<i>HS hours</i>	<i>% Adult</i>
Davis ATC	1,144,514	546,147	559,219	48%
Ogden-Weber ATC	1,236,061	860,096	375,965	70%
Uintah Basin ATC	507,586	288,653	214,401	57%
Bridgerland ATC	1,241,903	776,906	453,919	63%
<b>Total</b>	<b>4,130,064</b>	<b>2,471,802</b>	<b>1,603,504</b>	<b>60%</b>

**Table 13: ATE Adult and Student Hours**

The common factor for each of these ATCs is that there is no community college in the area to serve adult students, creating a need for the ATC to train those who have left the high school setting. Salt Lake Community College provides more than 5 million hours of credit and non-credit training to adults in the WFS service region – more than double of all ATCs combined. Prior to the creation of the WFSATC, the president of Salt Lake Community College was a board member of the WFSATC Service Region, a policy indication that SLCC should play a critical role in the delivery of Applied Technology Education within the Salt Lake valley.

It appears that an ATC in any region, not just the Wasatch Front South, can not be viable without adult students. The fact that the WFSATC is targeting adult students indicates that there is not enough demand for services from high school students to generate sufficient instructional hours. With Salt Lake Community College serving adult students in the WFS region, a stand alone ATC targeting adults seems to violate the statutory mandate to avoid duplication in the delivery of educational programs.

## Need for a Business Plan

When a company plans to enter a market with a new product, service or store it will develop a business plan that assesses current market conditions and projects future market needs. The Wasatch Front South ATC finds itself in a position similar to that of a new company attempting to break into the market – it needs to assess what services are needed, the number of customers available and the ability of others in the marketplace to provide for those needs. The current plan for program offerings calls for the WFSATC to provide instruction in culinary arts, medical technology and information technology. However, these programs have not been subjected to a thorough needs analysis to determine if there are students who will attend these courses or even if others already offer the courses in the area.

*Alternative  
Program Sources*

The Jordan School District recently signed an agreement with Salt Lake Community College that will allow the District to construct three 30,000 square foot ATE buildings on the SLCC West Jordan campus. The first of these buildings, which will be under construction in the Spring of 2000, will be dedicated to providing training in the medical technology area. Although not in the WFS service region, the Davis ATC currently offers a Culinary Arts program which can accommodate 45 students but only has about two dozen students enrolled in the program as of mid-October. While that would be a longer commute for most students, it would be a way of addressing their needs and it would not be as long of a commute as is currently expected of students in Tooele County. If the program at the Davis ATC is under-utilized, it makes sense to be sure that there is demand for a culinary program in Salt Lake before committing finite resources to the project.

<b>Commute Distances</b>	<b>From</b>	<b>To Davis ATC</b>	<b>To Jordan Tech Center</b>
<i>Granite District</i>	Cottonwood HS	30.1	10.6
	Cyprus HS	32.0	14.4
	Granger HS	26.9	7.6
	Granite HS	35.6	12.7
	Hunter HS	30.2	8.8
	Kearns HS	31.3	6.1
	Olympus HS	29.4	14.7
	Skyline HS	30.7	15.9
	Taylorville HS	29.0	7.1
		<b>Average</b>	<b>30.6</b>
<i>Jordan District</i>	Alta HS	39.2	8.7
	Bingham HS	35.6	3.4
	Brighton HS	36.9	12.0
	Copper Hills HS	35.6	4.3
	Hillcrest HS	34.7	7.9
	Jordan HS	36.6	5.9
	West Jordan HS	32.1	2.1
		<b>Average</b>	<b>35.8</b>
<i>Murray District</i>	Murray HS	28.8	9.0
	<b>Average</b>	<b>28.8</b>	<b>9.0</b>
<i>Salt Lake District</i>	East HS	23.5	17.4
	Highland HS	26.9	16.4
	West HS	19.6	17.9
		<b>Average</b>	<b>23.3</b>
<i>Tooele District</i>	Grantsville HS	56.8	47.4
	Tooele HS	51.0	41.6
		<b>Average</b>	<b>53.9</b>

**Table 14: Distances to Technology Programs**

## Cost Benefit Analysis

With limited sources of new funds available and a finite budget for transferring priorities, the State can only purchase the most critical goods and services. Certainly, a new ATC in the Salt Lake valley would be a nice addition to the services provided by the state, but the cost of providing such a facility would take nearly half of the new money available just for the ongoing programmatic costs. As shown in Table 5 above, first year programmatic funding for a new ATC would exceed \$5 million, climbing to \$9 million by the fourth year. In a region that already provides more than 10 million ATE hours to high school students and more than 5 million hours to adult students, spending \$5 million to train 1700 students may not be the most efficient use of state resources.

*SLCC and the Jordan School District have entered into a cooperative agreement*

The Jordan School District, following the example of Clark County Schools and the Community College of Southern Nevada, is finding creative ways to efficiently manage resources by working cooperatively with Salt Lake Community College. The five districts (and SLCC) could make resources go even further by creating specialized tech training centers in high schools around the valley. There are 22 traditional high schools (plus Salt Lake's Horizonte School) in the Salt Lake and Tooele valleys. Rather than offer the same programs at several high schools within the region, the districts could work together to consolidate programs at various locations in the valley. By creating "magnet" schools, students could travel to the school of their choice and take courses in a block rather than taking them one hour at a time. In the evening, the facilities could be used by adult students taking higher education courses.

*Distributed and Consolidated programs could save resources*

By consolidating resources and distributing programs, buildings would be better utilized and resources would be more efficiently allocated. Costs for this “distributed and consolidated” program could be shared by local school districts, the WFSATC and Salt Lake Community College. Each would seek funding for the program through traditional enrollment growth that is funded annually by the Legislature.

<b>School District</b>	<b>High School</b>	<b>Hypothetical Program</b>
<i>Granite District</i>	Cottonwood HS	Commercial Art
	Cyprus HS	Industrial Cooperative Education
	Granger HS	Drafting/CAD
	Granite HS	Photo Imaging
	Hunter HS	Collision Repair Technology
	Kearns HS	Computer Repair
	Olympus HS	Computer Programming
	Skyline HS	Residential Electrical Trades
	Taylorville HS	Fire Fighting Technology
<i>Jordan District</i>	Alta HS	Precision Machining
	Bingham HS	Law Enforcement
	Brighton HS	Cabinet Making
	Copper Hills HS	Construction
	Hillcrest HS	Electronics
	Jordan HS	Air Conditioning Technology
	West Jordan HS	Masonry
<i>Murray District</i>	Murray HS	Information Technology
<i>Salt Lake District</i>	East HS	Engineering Technology
	Highland HS	Culinary Arts
	West HS	Plumbing
<i>Tooele District</i>	Grantsville HS	Agriculture Technology
	Tooele HS	Aviation
<i>Salt Lake CC</i>	Diesel Facility	Diesel/Heavy Equipment
	W. Jordan Campus	Medical Technology

**Table 15: Example of Distributed and Consolidated ATE Programs**

If the school districts did not want to distribute programs around the two counties, they could consider other consolidation plans. Just as the Jordan School District is meeting the needs of its students by partnering with Salt Lake Community College, the other districts could join together to build a larger facility through their own bonding programs.

Currently, two districts served by the WFSATC have no bonded indebtedness and the average level of debt is less than \$1200 per student. Average debt is approximately one-half of one percent of the assessed value of property in the region.

	<i>1997-98 Bonded Indebtedness</i>	<i>Student Enrollment</i>	<i>Debt Per Student</i>	<i>Estimated Valuations</i>	<i>Debt to Value Ratio</i>
Granite	-	74,393	-	\$13,836,670,474	0.0000%
Jordan	\$166,910,000	73,180	2,281	12,498,538,647	1.3354%
Tooele	21,970,000	8,019	2,740	1,292,015,267	1.7004%
Salt Lake	34,740,000	25,614	1,356	10,860,081,937	0.3199%
Murray	-	6,940	-	1,988,248,145	0.0000%
<b>Total</b>	<b>\$223,620,000</b>	<b>188,146</b>	<b>1,189</b>	<b>\$40,475,554,470</b>	<b>0.5525%</b>

**Table 16: Debt Levels in the WFS Region**

By using district bonds for a facility, each of the school districts and Salt Lake Community College could share in the operation and maintenance costs while developing articulated programs that could lead directly from high school into higher education. As in the above scenario, funding would flow to each agency based on enrollment growth in the programs that each offer.

### **Conclusion: ATE is an educational program, not a facility**

House Bill 34 of the 1999 General Session amended Utah Code 53A-15-202.5, establishing the Wasatch Front South Applied Technology Center “to assist in providing applied technology education in an efficient and cost-effective manner throughout the state.” The bill also split funding for training into student and adult categories, assigning the mission of adult education to Salt Lake Community College and giving the role of educating K-12 students to the WFSATC. The bill as passed left open the question as to whether the creation of the WFSATC was a mission change that may require additional facilities in the future or if it assumed that the current facility housing the WFSATC would continue to be the primary capital facility for the center. Legislative clarification of this distinction would provide essential guidance in future facility planning.

Applied Technology Education has been a priority of the Legislature and should continue to be a priority. However, *Applied Technology Education is independent of the facility that houses the programs.* The Analyst believes that the Legislature should consider a policy that encourages the efficient use of resources by providing increased programmatic funding that the WFSATC board could use to develop programs for high school students within existing facilities owned by local districts and the Salt Lake Community College.