Case Statement

1. Name and address:

   Manhattan Area Technical College,
   3136 Dickens Avenue, Manhattan, KS 66503

2. Name, title, telephone number, and e-mail address of contact person at the organization:

   Dr. Robert J. Edleston, President/CEO
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3. Name of Project:

   MATC Health and Science BioTeks Building

4. Description of Project:

Time is of the essence. Kansas is presently underprepared to meet the upcoming demand to operate NBAF. Laboratory technicians and other one- and two-year degreed individuals will not be relocating from Long Island, NY and other states to follow the National Bio and Agro-Defense Facility (NBAF) but, will instead, come from Northeast Kansas and the surrounding areas. The attitude of "wait and see" that has thus far placed Kansas last among the 50 United States in the number of citizens who seek technical training will spell disaster for the entire effort unless something is done now.

In order to serve Kansas and the nation, to extent required, Manhattan Area Technical College requires capital funds to construct a health and science center on our campus as a part of the NBAF relocation. We estimate that a total of sixteen million dollars will be needed to construct a state-of-the-art facility adequate to accomplish the numerous tasks at hand and that at least a third of these fund need to come from the federal government. The facility will include a number of learning spaces and real time simulators allowing students to experience actual working conditions in bioscience and health settings.

Why the urgency? For the past several years Kansas and other states have been vying for the NBAF to be placed within their state. When it was announced that the facility moving from Plum Island NY to Manhattan KS it was realized that the facility would arrive without the worker-level technician pool. Therefore, in addition to the many preparations that will need to be done before the facility can become operational, the establishment of a highly qualified and renewable workforce should be considered a high priority given the time it takes

to propagate such a cadre of individuals. Since Manhattan Area Technical College is the workforce producing education institution in Manhattan we have vowed to be responsible to produce laboratory technicians and other workers to support the scientists and other graduate level professionals in their daily duties.

Since the announcement was made it has become an exciting time for Kansas and Manhattan Area Technical College in particular. It is not often that an opportunity befitting an organization's mission becomes available with the magnitude afforded us by the approval of the NBAF on the KSU campus. In MATC's 46 years of service to NE Kansas we have provided the highest quality education and training in a variety of technical fields. During that period our opportunities to serve to our fullest were hampered by two main obstacles. The first obstacle was a lack of state-level focus on technical education and a lack of the fiscal resources that would have come with our recognized value. In the past four years that has taken a turn and Kansas is experiencing an incredible evolution supported by the Governor and all branches of state authority. A new tiered funding formula will be put into place with the passage of HB 143. When funding becomes available, this formula will help supplement the high cost of technical education and begin to create a dynamic resurgence of economic development in the state prompted by the growth of our workforce.

The second obstacle has been a notable lack of facilities either on or off campus within the community. While MATC has grown in enrollment over 120% in the past four years we have not had the resources to add faculties and therefore are full to capacity. MATC does not possess taxing authority and is not supported by State-level capital funds through the Legislature.

> *The fact that this facilities' movement to Manhattan comes without funding to train the missing workforce has shifted this responsibility onto MATC's shoulders.*

We have been trying desperately for three years to obtain capital funds for an adequate facility to absolutely no avail. We have been successful in securing several training grants and three temporary modular buildings to act as a stop-gap but it will not be sufficient for very long.

In addition to the NBAF phenomenon, with the return of thousands of military personnel to Ft. Riley 5 miles to the West and the growth associated with the dozens upon dozens of collateral companies that will invariably follow the NBAF, the needs within other technical fields has also increased. Northeast Kansas is facing severe shortages in a number of allied health fields at the one- and two-year certificate and degree levels and while many turn their eyes to the universities for answers it is not the university's duty to provide workers at this level, it is ours. Manhattan Area Technical College has already received almost one half million dollars from various grants to establish additional allied health programs in Manhattan. Our goal and charter according to our Board of Directors is to become a Center of Excellence for Allied Health programs in

Kansas at the one- and two-year level to include: the program presently in place, those we are developing, and many more on the drawing board awaiting facilities. In August 2009 MATC began offering Medical Laboratory Technology and Surgical Technology in collaboration with Seward County Community College 350 miles away. This August, however, we will be taking over the Laboratory Technology program ourselves because of the increased demand within our region that requires us to expand our efforts beyond the collaborative model. In the meanwhile, we are also working with K-State University and Colby Community College in the area of Veterinary Medicine Technology to be delivered here in Manhattan.

Obviously MATC is the right institution, in the right place, at the right time to handle the needs facing this region but we must have the facilities to ensure success at the level necessary for entities such as NBAF and others. While we realize that the economy is still not in a position of prosperity, we must also realize that it is returning.

> *We must begin to produce the graduates now so that there can be an ample workforce in place and ready when NBAF and others open their doors. A delay in this area will result in an embarrassing situation for those who touted our readiness; not to mention the dangers that come from being unprepared.*

Here is the good news. This investment in Manhattan Area Technical College Heath and Sciences BioTeks building will funnel **a minimum return of investment in excess of $117 million** over the seven years and much more throughout the 73 year median lifespan of the building into the local economy.

According to a hiring official of Kelly Scientific, the most significant development in the biotechnology industry will be the *lack of a qualified workforce to meet the needs of emerging technologies*. Because of rapid growth, biotech firms often demand more skilled workers than are available and are projected to need more workers than are currently enrolled in training programs. *Our goal is to meet this need in Manhattan and Kansas by training employees for high-wage, high-demand career positions in healthcare and bioscience*

The employment outlook for workers trained in lab skills is particularly promising in the Manhattan area. With Manhattan's successful bid for NBAF and corresponding "magnet effect" drawing additional scientific researchers to the area (an estimated 20-40 companies), the depth and breadth of plant and animal research being conducted at Kansas State University, and our community's location in the designated Animal-Health Corridor, there will be a considerable need for laboratory technicians. Firm numbers are difficult to predict at this point; however, developing and implementing new training programs takes time. To be ready to meet approaching workforce needs, we must begin now.

The following tables indicate projected employment and wage data for technicians in Kansas related to the programs who will be directly served in the new facility. As a side not, although not housed in the Health and Sciences building, MATC is in the early stages of planning a program designed specifically to train HVAC technicians to maintain the specialized systems used in secure laboratories such as NBAF.

Wages	Entry level	Median	Experienced
Sciences			
Biological Technician	$26,060	$33,810	$39,310
Hourly wage	12.53	16.26	18.90
Medical, Clinical, and Research Laboratory Technicians	22,150	29,890	35,410
Hourly wage	12.53	16.26	18.90
Facility Support			
High Tech HVAC Systems Maintenance Technician	25,013	32,356	40,605
Hourly wage	15.84	19.81	24.00
Allied Health			
Nursing Assistants	14,740	22,560	27,098
Hourly wage	9.70	10.61	12.62
Practical Nurses	27,342	36,600	47,848
Hourly wage	12.63	17.56	21.96
Registered Nurses	38,342	55,730	73,670
Hourly wage	19.62	25.52	36.07
Dental Hygienists	34,066	65,250	77,217
Hourly wage	28.03	32.66	37.28

Source: http://www.payscale.com/research/US

Options for lab technician training in Kansas are limited. Johnson County Community College (Overland Park, 130 miles from Manhattan) offers an AAS Degree in Biotechnology geared toward bio-manufacturing; Cloud County Community College (Concordia, 80 miles from Manhattan) offers a theory-based

AAS degree in agricultural biotechnology. The closest Medical Lab Tech program is at Barton County Community College (Great Bend, KS 150 miles from Manhattan).

The largest concentration of laboratory workers in our state is found in the greater Kansas City area, home to many bioscience and bio-manufacturing companies such as Harcros Chemicals, REMEL, and Midwest Research Institute. A few years ago, the region was awarded a OneKC WIRED grant to train unemployed and dislocated workers to meet workforce needs in bioscience. Educational and business partners worked together to create employee training and placement in their region. When MATC began to develop biotech training in 2009, OneKC WIRED partners generously provided guidance.

However, the training and employment needs in our region differ from the Kansas City area. Companies in Kansas City are more focused on the bio-manufacturing side of the industry. NBAF and symbiotic labs will focus on research in the areas of food and animal health and safety. In 2010 Manhattan Area Technical College created the **BioTeks** Training Curriculums. The training developed by MATC *specifically targets competency in the skills needed for work in a research laboratory*: laboratory math (metrics, measurement, weights, and scientific notation), quality assurance/control, lab safety, solutions, microbiology, tissue and cell culture, instrumentation, proteomics, and more.

As a technical college, MATC is the regional institution best prepared to develop and provide training at the technician level, while coordinating with secondary and baccalaureate programs to create a career ladder to prepare laboratory workers at all levels. As stated earlier, MATC initiated a **Medical Lab Technician (**in partnership with Seward County Community College) program in August 2009. Also that year, faculty developed and piloted introductory and **entry-level biotechnician training**, as well as an **Advanced Applied Laboratory Training Certificate** program that received approval from the Kansas Board of Regents and Kansas Technical Education Authority in April 2010. The advanced laboratory certificate requires program applicants to possess a degree in a science-related field. In other words the program creates reverse matriculation which provides degreed individuals with hands-on skills not obtained through traditional university programs and creates a more robust, engaged workforce.

Annual and Cumulative Training Goals by Program

Program	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Basic Laboratory Techniques Training (Entry-level Certificate)	12	14	18	18	18	18	18
Advanced Applied Laboratory Technician Certificate	10	14	14	18	18	18	18
Medical Lab Technician (Associate's Degree)	12	14	14	14	14	14	14

Nursing Assistant (Certificate)	54	54	54	54	54	54	54
Practical Nurse (Licensure)	45	45	45	45	45	45	45
Registered Nurses (Associate's Degree and Licensure)	48	48	48	48	48	48	48
Dental Hygienist (Associate's Degree and Licensure)	14	14	14	14	14	14	14
HVAC Systems Maintenance Technician	Planning	Planning	12	15	15	18	18
Total	**195**	**203**	**219**	**226**	**226**	**229**	**229**
Cumulative	**195**	**398**	**617**	**843**	**1,069**	**1,298**	**1,527**

MATC graduate placement rates are positive, with approximately 50% remaining in Manhattan and the surrounding area. For 2008 graduates, a follow up study indicated that 78% of all graduating students were employed in their chosen field within 6 months after graduation. For HVAC students, 100% became employed; for nursing, 92% were employed.

The following table shows the cumulative economic contribution resulting from this project, based on **50% retention** of trainees in Manhattan Area, average annual salary of **$39,457**, and **projected training numbers** from the table above:

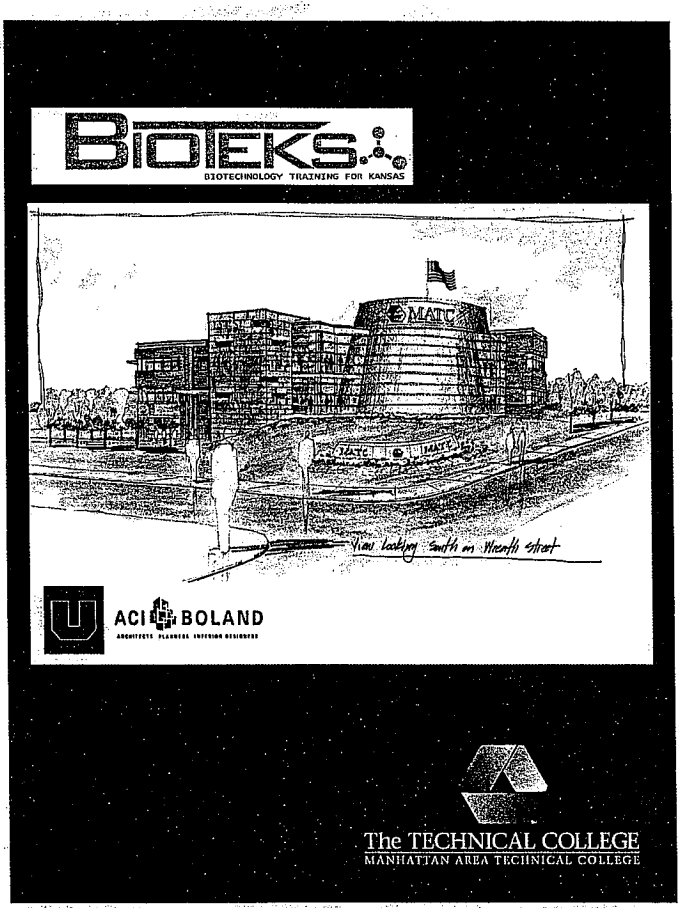
Employees Retained and Economic Impact as a Result of Targeted Career Programs

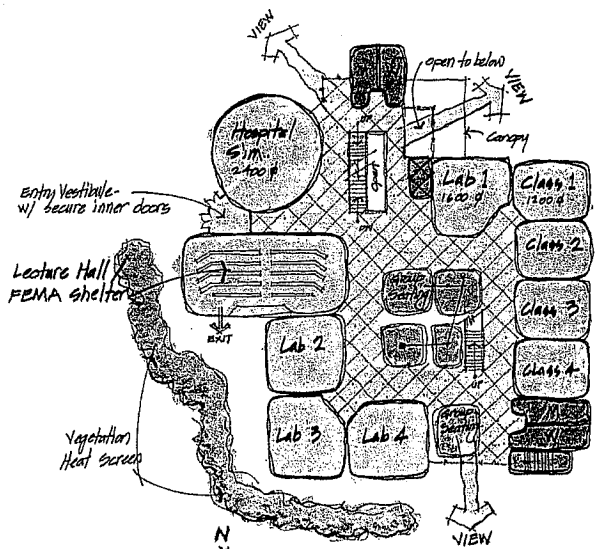
	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
Cumulative Number of Graduates[1]	195	195	195	195	195	195	195	1,3
		203	203	203	203	203	203	1,2
			219	219	219	219	219	1,0
				226	226	226	226	9
					226	226	226	6
						229	229	4
							229	2
Total =	195	398	617	843	1,069	1,298	1,527	5,9
95% In-State Retention	185	378	586	801	1016	1233	1451	5(
50% Local Retention =	98	199	309	422	535	649	764	2(
Average Salary =	$39,457	39,457	39,457	39,457	39,457	39457	39,457	$39,4
Economic Impact at 95% retention	**7,299,545**	**14,914,746**	**23,121,802**	**31,605,057**	**40,088,312**	**48,650,481**	**57,252,107**	**$222,932,0**
Economic impact at 50% retention	**3,866,786**	**7,851,943**	**12,192,213**	**16,688,834**	**21,109,495**	**25,607,593**	**30,145,148**	**$117,462,0**

1 Numbers in diagonal (green) represent the number of new graduates for that year. Numbers above are carryover from year to year.

With all of that being said, I reiterate, we are out of time. In order to serve Kansas and the nation to extent required, Manhattan Area Technical College requests capital funds be appropriated in order to construct a health sciences center on our campus. We estimate that sixteen million dollars will be needed to construct a state-of-the-art facility adequate to accomplish the numerous tasks at hand.

We thank you for your efforts and look forward to working together on this and other future projects.





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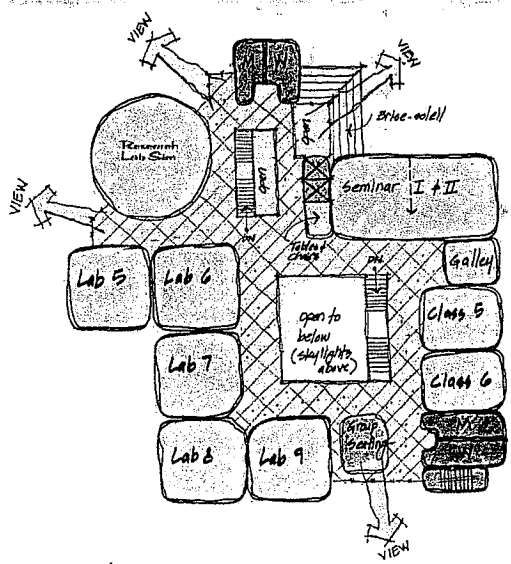

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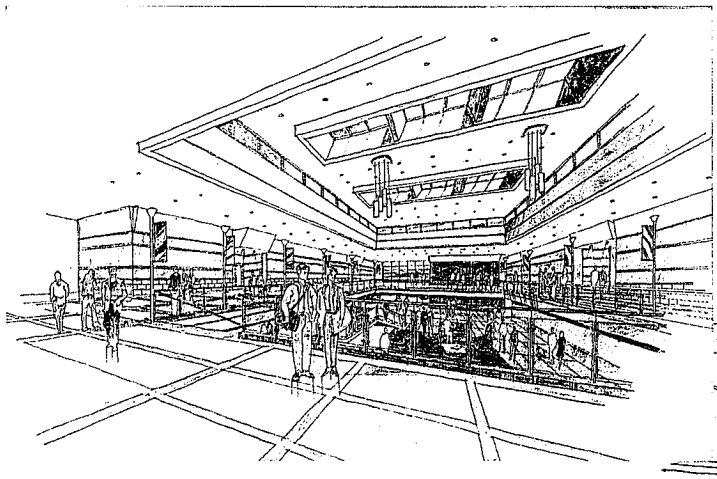
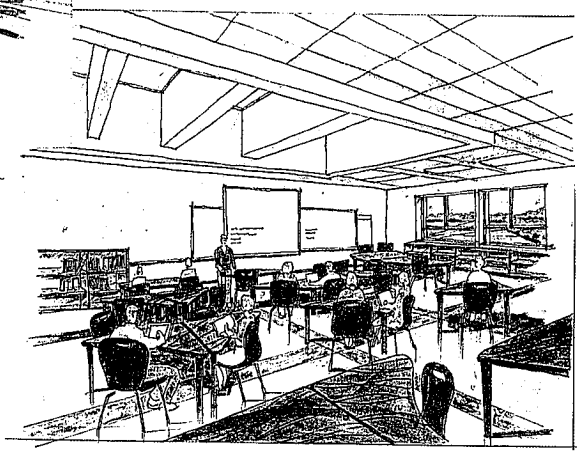
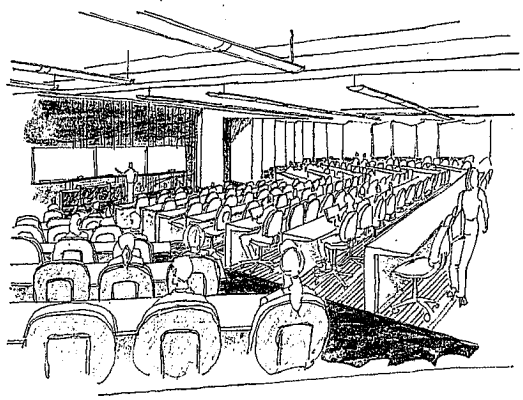
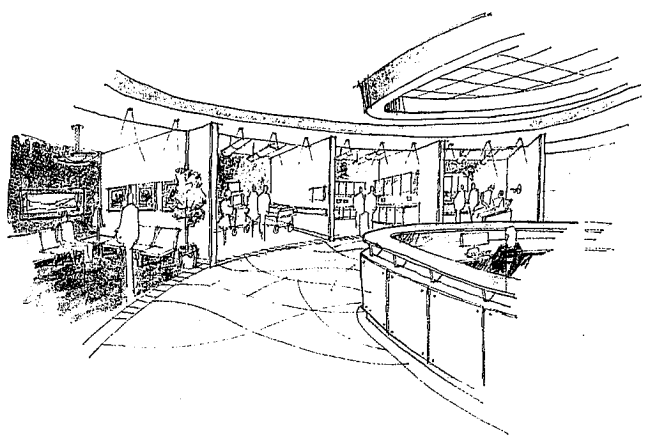
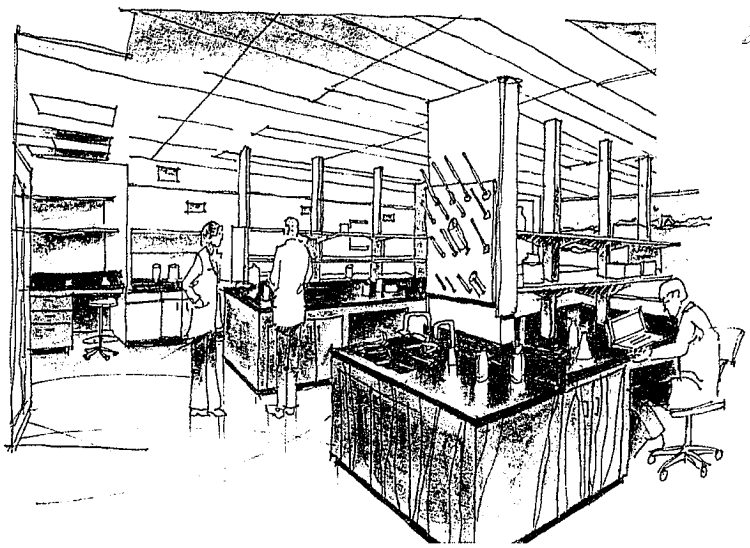










Manhattan Area Technical College
Health and Sciences BioTeks Building
(250 minimum - 650 maximum students per instructional block hour depending upon scheduling and enrollment)
Draft Mar 2011

Description	Quantity	Dimensions	Sq. Ft.(ft^2)	Total ft^2
First Floor: Allied Health				
Hospital Simulator	1	Circular	2,400	2,400
Dental Hygiene Lab	2	40 X 40	1,600	3,200
Hospital Suite	2	40 X 40	1,600	1,600
Allied Health Storage Areas	8	10 X 10	100	800
Classrooms	4	30 X 40	1,200	4,800
Sub-Total				12,800
Second Floor: Bio-science Laboratory Technologies				
Research Laboratory Simulator	1	Circular	2,400	2,400
Science Laboratory (A&P, Biology, Micro)	1	40 X 40	1,600	1,600
Science Laboratory (Chemistry, Bio-Tech, Med Lab)	1	40 X 40	1,600	1,600
Bio-Medical Equipment Technology Lab	2	40 X 40	1,600	3,200
Classrooms	2	30 X 40	1,200	2,400
Distance Learning Labs	1	20 X 40	800	800
Laboratory Technologies Storage Areas	6	10 X 10	100	600
Sub-Total				12,600
General Instruction, Administration, & Miscellaneous				
Lyceum (Lecture Hall) 250 seat	1	40 X 80	3,200	3,200
Seminar Room (w/divider)	1	40 X 80	3,200	3,200
Faculty Offices	18	10 X 12	120	2,160
Administrative Office	1	10 X 14	140	140
Reception (with work room)	1	10 X 14	140	140
Student Lounge	1	20 X 20	400	400
Conference Room	1	15 X 20	300	300
Copier/Workroom	2	10 X 15	150	150
Media Room/Media Storage	1	16 X 16	256	256
Vending Area	2	10 X 12	120	240
Bookstore	1	30 X 30	900	900
Sub-Total				11,086
Net Assignable Square Feet (NASF)				36,486
Non Assignable Area (elevators, rest rooms, stairs, lobby, wall, electrical, mechanical, corridors) per floor	3		4,505	13,514
TOTAL				50,000
Estimated Cost of Construction (@ \$250/ ft^2)				\$12,500,000
Estimated Cost of Furnishings & Equipment				\$1,000,000
Facility Maintenance/Sustainability				\$1,500,000
Architectural Services (Basic Service)				\$800,000
Professional Renderings, Soil Reports, Printing, etc.				\$200,000
TOTAL PROJECT NEEDS				\$16,000,000

5. Funding Needed:

$16,000,000 total (see paragraph 7)

6. If required, are matching local funds available?

None available at this time

7. Has the project received prior funds or are you seeking funding from other sources of revenue, i.e. grants, state/local government, private sector funding? If so, from what source? (i.e. CDBG, Rural Development, etc.)

We are seeking $5,000,000 from the Kansas Bioscience Authority as a pledged match to entice other entities to help fund this critical project.

We hope to secure funds $5,000,000 from other Kansas-based investors as a result of the pledges obtained from KBA and the Federal Government.

8. Please give a detailed budget of how the funds will be spent:

The entire budget will be spent to construct and equip Health Sciences Building as described above to include project management, architectural and engineering fees, equipment, and furnishings.

9. Describe the organization's main activities, and whether it is a public, private non-profit, or private for-profit entity.

Manhattan Area Technical College (MATC) is a publicly owned institution of higher education providing quality technical and general education to prepare individuals to pursue technologically advanced careers and lead productive lives. Through its unique educational offerings in several industrial, business and health-related occupations, the College enriches the lives of its students and enhances the ability of businesses in its service area to meet both their educational and economic goals. With a newly defined territory, the long-held goal of expanding technical education services beyond the Manhattan area is becoming a reality. The College's faculty and staff recognize that MATC's primary role is to provide educational opportunities that meet the needs of its students. However, they also seek opportunities to share their expertise working with stakeholders to complete projects that offer real and tangible benefits to nearby communities, thus enhancing the lives of many Kansans.

Service Area Profile

Kansas's technical colleges have no legislatively prescribed boundaries. Each depends on the strength of its educational offerings and unique ability to meet the needs of students to ensure enrollment. MATC's self-described service

area cuts a broad band through northeast Kansas. In this area characterized by miles of rolling prairie, interrupted only occasionally by small Midwestern towns, all or part of ten Kansas counties (Clay, Dickinson, Geary, Marshall, Morris, Nemaha, Pottawatomie, Riley, Wabaunsee, and Washington) are found. According to 2001 United States census figures approximately 180,000 people live in this area encompassing more than 8000 square miles. Manhattan, county seat for Riley County and home of the College, has a population of nearly 45,000, but the rest of this region is very sparsely populated.

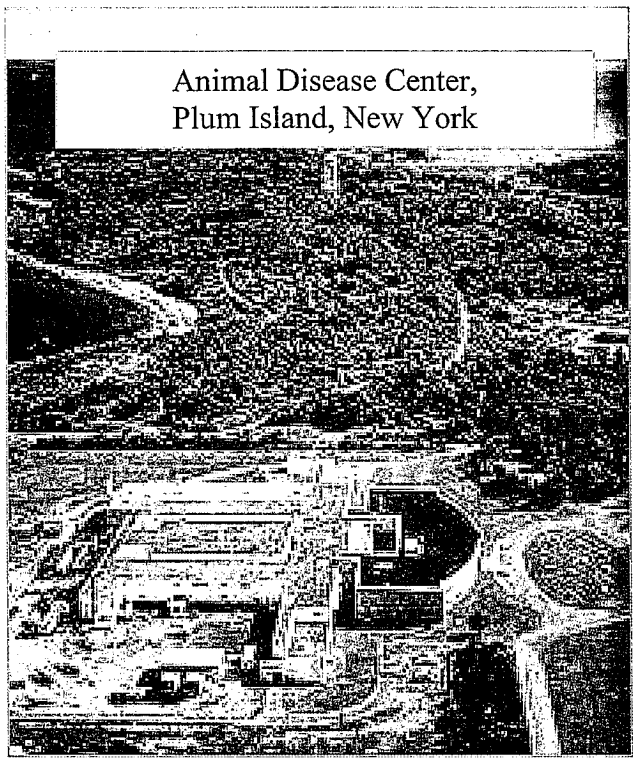
As one might expect, the overwhelming majority of individuals residing within the service area are of Northern European heritage. Fortunately, the presence of Kansas State University with its faculty and staff of more than 5000, many of whom have relocated from areas far from the Flint Hills, and Fort Riley, the country's second largest military installation located just a few miles from the MATC campus, bring a richness of ethnic and cultural diversity to the service area.

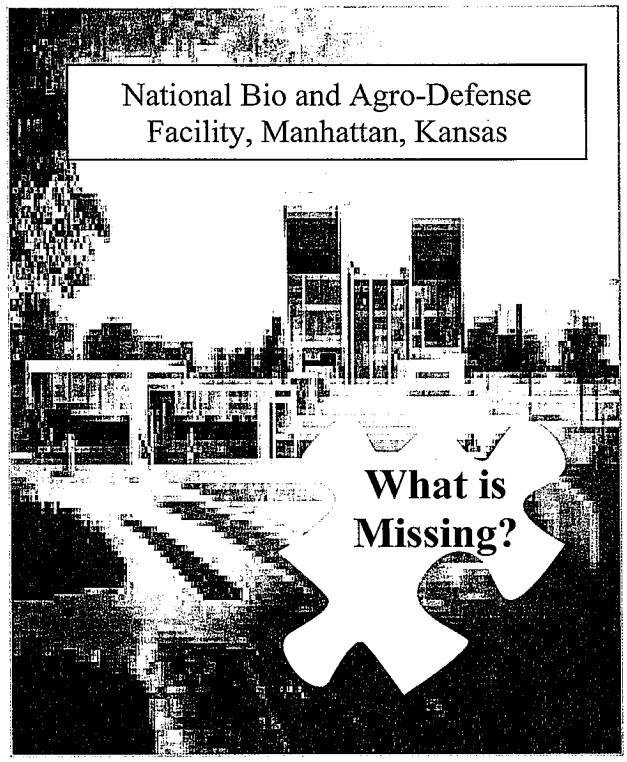
Farming and ranching are the economic strongholds in the region and many residents work in agriculture. Retail trade is the region's second most common field of employment. MATC shares its service area with the satellite campuses of several community colleges, a small four-year Christian college and, most importantly, Kansas State University; thus, educational workers abound. The educational arena is the third most common field of employment in MATC's service area. Other common occupations include employment in the areas of health services and public administration. Finally, many military personnel from Fort Riley and their families live in the area. In the near future, the "Big Red 1" will return to Fort Riley after a prolonged assignment in Europe. It is estimated that that combination of soldiers and their families will increase the surrounding population by nearly 10,000.

According to the U. S. Census Bureau, the population of Kansas has grown slightly and aged significantly over the last ten years. This "graying of the prairie" is often linked to the tendency of many of the state's highly trained young adults to leave in search of better employment opportunities. To change this pattern and encourage young Kansans to remain, efforts are being made throughout the state to diversify the economic base and attract new, and often unfamiliar, industries to Kansas communities. This is certainly true for many of the cities and towns in Northeast Kansas. Manhattan, for example, has been successful in attracting several new employers in recent years by touting the availability of a technologically proficient labor pool that is steeped in the traditional Midwestern work ethic. Recently, growth in light manufacturing, food processing, communications, and distribution industries has added to the economic diversity in this area. Each new company or unfamiliar technology places greater demands for workers to acquire additional skills to stay current in their chosen fields. Meeting the need for these skills offers ever-increasing opportunities for MATC to serve its students, its stakeholders, and the community.

10. How will the project benefit the local community, Kansas, and/or our nation?

Besides the incredible return on investment of $117,000,000+ this project will be of benefit by ensuring a qualified workforce is prepared now, and continuous efforts are maintained, in order to ensure a qualified workforce remains in place at the NBAF and other critical research facilities in the area, we will ensure a safer World.





"When the NBAF laboratory's support personnel do not relocate to Manhattan Kansas, and the local area does not possess a large enough qualified workforce, how will the facility operate?"