

Michigan Technological University
Advancement & Marketing

2000-2010 Strategic Plan Portfolio

February 7, 2000

Executive Summary:

Advancement & Marketing (A&M) is the University unit responsible for providing leadership in marketing, image management, relationship building, and increasing the availability of resources through gifts, technology partnerships, and student enrollment.

**The vision of the Advancement and Marketing
Department is to enhance the resource and relationship
building needs of Michigan Tech, enabling it to become a
nationally recognized research university**

To reach this vision, the A&M strategic goals are to:

1. Assure Michigan Tech has sufficient private support to meet the development objectives of a nationally recognized research university.
2. Optimize undergraduate enrollment to meet Michigan Tech's global vision.
3. Assure the University image and relationships are cultivated and stewarded to and from the University's many constituencies.
4. Market Michigan Tech's research enterprise through competitive intellectual property and technology commercialization programs that expand Michigan Tech's affluence and influence.
5. Help maintain excellence in undergraduate and graduate education, scholarship, creativity, global understanding, diversity, sustainability and entrepreneurship through external relationships and partnerships.

Table 1 correlates these goals to the A&M program areas and provides points-of-contact for each.

Table 1: Advancement & Marketing Program Summary

Program Areas	Goals					Points-of-Contact
	1	2	3	4	5	
Strategic Plan Coordination	a	a	a	a	a	John Sellars
Michigan Tech Fund (MTF)	P		a		a	Kimera Maxwell Way
Enrollment Management (EM)	a	P	a		a	Gary Neumann
Career Center (CC)		a	P		a	Joseph Galetto
University Relations (UR)	a	a	P	a	a	William Curnow
Alumni Relations (AR)	a	a	P		a	Stephan Olsson
International Advancement (IA)	a	a	P	a	a	Elsie White
Corporate Relations (CR)	P		P	a	a	Peter Radecki
IP/Technology Commercialization (TC)	a			P	a	Peter Radecki

* **“P”** indicates goal of primary focus; **“a”** indicates additional goals supported.

Environmental Factors and Planning Premises

The focus of the Advancement & Marketing (A&M) area over the next decade (to Michigan Tech’s 125th anniversary in 2010) is to prepare Michigan Tech for an increasingly competitive, dynamic, and global marketplace. Our primary tasks are to provide sufficient resources and build the relationships needed by a nationally recognized research university. This A&M strategic plan is built on the five goals listed above. Achieving these goals depends on departmental alignment, teamwork, and measurable objectives. These goals are based on the guiding principles identified in the University plan:

1. The success of our students will always be the most important measure of our success.
2. Everyone’s contribution to our success is needed and will be valued.
3. Through collaborative efforts, we will serve the people of Michigan, the nation and the world.

Over the planning period 2000-2010, we expect that rapid changes in education, information technology, industry and society will continue; and these changes may very well challenge the very fundamentals of education and knowledge acquisition.

Table 2 provides a summary of our recently completed SWOT analysis. The table correlates factors based on whether they are predominantly internal or external to A&M. For reference, the factors are also correlated to the A&M programs (units) introduced in Table 1 and described further elsewhere in this document.

Table 2: Environmental Factors for A&M Strategic Planning

	University-Wide (with respect to the A&M mission and Michigan Tech’s markets)		Internal A&M Factors	
	Description	A&M Units Affected*	Description	A&M Units Affected*
Strengths	High potential for private support University’s strong technological focus Strong demand for technically trained graduates Location, size, outdoor lifestyle Committed, successful alumni Academies, advisory boards Integrated marketing plan Competitive quality of academic programs Intellectual props have great potential for licensing Many researchers willing to work on commercial applications Many alumni skilled in IP and technology commercialization willing to help	MTF, IA, CR CR, TC CC, CR EM, IA MTF, CR CR, AR EM EM, CC TC TC TC	Dedication of staff team Comprehensive giving programs Experience/quality of staff Competitive financial aid and scholarship programs New facilities (Meese Center) Good IT for employment marketing Quality of publications Diversity of communication capabilities University committed to supporting technology commercialization	All units MTF EM, UR, CR EM CC CC UR UR TC
Weaknesses	Insufficient academic breadth to reach highest giving level with many corps University can be slow to innovate Enrollment levels Narrow or lack of image Student, staff, faculty lack of diversity Lack of a culture of giving among many alumni Lack of alumni in executive positions in major corporations Connectivity with alumni Location a long way from most alums and corporations Other universities closer to companies Mixed levels of commitment to enrollment targets Lack of visibility in major enrollment markets Lack of understanding of technology commercialization	CR EM, CR EM, CR EM CC, CR CR CR AR MTF, CR CC, CR EM EM TC	Budget constraints when needing growth Short history of success Inability to attract/pay experienced staff Small Endowment Funding for enrollment marketing is year-to-year instead of long term Tendency to think as info providers instead of marketers Too few corporate dev. officers Lack of a corporate prospect tracker Lack of a program for cultivating small companies Lack of experience in technology commercialization/business dev.	IA, TC, AR MTF, TC MTF MTF, EM EM UR CR CR CR TC
	University-Wide (with respect to the A&M mission and Michigan Tech’s markets)		Internal A&M Factors	

	Description	A&M Units Affected*	Description	A&M Units Affected*
Opp ortu nitie s	<p>Many prospects for industry/technology partnerships and donations</p> <p>Coordination of advisory boards would enhance donation culture in companies</p> <p>Increase intern and co-op programs</p> <p>Untapped alumni resources</p> <p>Web marketing</p> <p>Excellent job opportunities for graduates</p> <p>Positive culture for private support</p> <p>Aging population</p> <p>Expanding markets in Minn., Milwaukee, Chicago</p> <p>New academic programs have wide appeal, e.g. biomed and computer engr</p> <p>Use of alumni in national recruiting</p> <p>Increased private and state support for scholarships</p> <p>New communication vehicles</p> <p>Promoting Michigan Tech in a broader geographic area</p> <p>Rapid rate of corporate restructuring</p> <p>Michigan Tech Enterprise Park</p> <p>Patent donations</p> <p>Technology partnerships with State</p>	<p>CR, TC</p> <p>CR</p> <p>CC, CR</p> <p>MTF, AR</p> <p>MTF, CR, TC, AR</p> <p>CC</p> <p>MTF</p> <p>MTF</p> <p>EM</p> <p>EM, CC</p> <p>EM, AR</p> <p>EM</p> <p>UR</p> <p>UR</p> <p>CR</p> <p>TC</p> <p>TC, CR</p> <p>TC</p>	<p>Targeted marketing</p> <p>Interactive marketing via Internet</p> <p>Greater engagement of MTF development officers in corporate cultivation</p> <p>Improving consistency in intellectual property counsel and services</p> <p>Utilization of centers and institutes in technology commercialization</p> <p>Partnering with other units to enhance alumni events</p>	<p>UR</p> <p>UR, AR</p> <p>CR</p> <p>TC</p> <p>TC</p> <p>AR</p>
Thr eats	<p>Changing economic conditions</p> <p>Competition from other schools, particularly with growth in engr, science and computer programs</p> <p>Competition from research institutes, national labs, etc.</p> <p>Distance from markets</p> <p>Declining interest in engineering and science by high school students</p> <p>Rapid rate of technological change</p> <p>Rapid rate of corporate restructuring</p> <p>Greater demand for detailed accountability among corporate foundations</p> <p>Potential tax law changes in estate and capital gains</p>	<p>MTF</p> <p>EM, CC, CR, TC</p> <p>TC</p> <p>EM, CC</p> <p>EM</p> <p>CR</p> <p>CR, TC</p> <p>CR</p> <p>MTF</p>	<p>Limitations in recruiting and retaining quality staff</p> <p>Support for a shared vision of Michigan Tech's identity</p> <p>Funding too small for expansion into new media, e.g. Web</p> <p>New media do not replace old</p>	<p>MTF</p> <p>UR</p> <p>UR</p> <p>UR</p>

* See Table 1 for A&M Unit abbreviations

Program Descriptions

The strategic plan is a dynamic process whereby management is seeking to respond to societal shifts. In A&M, we spent considerable time evaluating the myriad of programs. In most cases, new insights were made and worthwhile enhancements identified. In some cases, we uncovered disconnects between our existing activities and the vision and goals stated on Page 1. In such cases, new programs have been characterized.

Strategic Plan Coordination: The development of a strategic plan begins with strategic thinking. The executive group of A&M had a retreat in early fall 1999 to discuss strategic issues and meets biweekly to identify strategic possibilities. These pages have grown out of our joint efforts to evaluate the environment and societal shifts. Also, the plans have been shared with members of the University's executive council to ensure integration with other units.

While this document is a snapshot of a point in time, our discussions will continue as we seek to create strategic niches and respond to the environment. Our objective is to make sure that the departmental goals are in alignment with the A&M goals and with each other, interconnected. Also, we have sought to provide measurable goals so we can evaluate our progress. The next few pages provide strategic plans for each of the departments in A&M.

Michigan Tech Fund

The MTF is the official agency designated to solicit, receive, and manage private gifts on behalf of Michigan Tech. A separate non-profit (recognized by the IRS as a 501(c)(3)) organization, the Michigan Tech Fund operates under the control of an external and independent Board of Trustees. Its mission is to proactively support Michigan Technological University by identifying, cultivating, soliciting, managing, and increasing private resources to benefit all areas of the University.

The Michigan Tech Fund includes an executive director, seven development professionals assigned to campus constituencies, and directors of planned giving, foundation relations and annual gifts. Supporting this is a staff of 27 personnel providing research, records, accounting, annual giving, and clerical support.

MTF is chiefly responsible for supporting A&M Goal 1, which is to assure Michigan Tech has sufficient private support to meet the development objectives of a nationally recognized research university. During the 2000-2010 planning year, the Tech Fund's objectives are to:

1. Successfully launch and complete \$140 million campaign now underway by 2003.

- Focus on leadership gifts, continue to develop the major gifts, and expand annual giving.
- Evaluate current staffing and programs with the greatest opportunity for growth. Evaluate and improve the internal operations supporting the campaign.
- Restructure Tech Fund board to engage and develop leaders for future campaigns.
- Implement and promote gift-giving over the web during the public phase of the current campaign to fully integrate the web's potential for future campaigns.

- 2. Implement planning process by January 2002 for Endowment Campaign**
 - Match specific endowment needs with market opportunities for fund-raising.
 - Evaluate current staffing and infrastructure to match resources with opportunities.
 - Identify leadership gifts for endowment campaign.
- 3. Announce Endowment Campaign in 2005 to reach \$400 million endowment by 2010**

Enrollment Management

Enrollment Management is responsible for the development and stewardship of prospective student relationships for the purpose of enrolling and retaining a highly qualified and diverse undergraduate student body. This mission is implemented by nine professional and four support staff in the Office of Admissions and nine professional and two support staff in the Office of Financial Aid. Providing leadership and marketing support for the entire operation is the executive director of enrollment management and marketing.

During the period 2000-2010, Enrollment Management's objectives are:

- 1. In support of A&M Goal 2, optimize undergraduate enrollment (quality, quantity, skill, and diversity).**
 - Complete telemarketing center development - 2000.
 - Develop alumni/admissions program - 2001.
 - Develop Detroit-area office - 2001.
 - Complete coordinated communication plan - 2002.
 - Complete technology upgrades for admissions and financial aid - 2002.
 - Raise undergraduate inquiry bases to 50,000 inquirers per recruitment cycle - 2003.
 - Reach undergraduate enrollment goal of 6,300 (or strategic plan level) - 2005.
- 2. In support of A&M Goal 1, participate in private fund raising.**
 - Develop a strategic financial aid plan - 2001.
 - Reduce general fund support for student scholarships by 75% (\$8.25 million) - 2010.
- 3. In support of A&M Goals 3 and 5, participate in activities dealing with the University image, relationship building, advancement of excellence and diversity.**
 - Conduct a national advertising campaign to build a broader awareness for MTU - 2005.
 - Conduct a marketing campaign targeted for gender, racial, and ethnic diversity - 2002.

Enrollment Management's ability to reduce general fund support for student scholarships and financial aid will depend largely on the success of A&M units such as the Michigan Tech Fund and Corporate Services in generating private support. Enrollment growth and diversity goals will require cooperative efforts with the Alumni Association, University Relations, and International Advancement.

Enrollment management also needs to work closely with academic units, residence hall management, and Educational Opportunity in shaping and managing enrollments. A broad-based enrollment management committee will be formed for this purpose.

Performance should be based on enrollment growth in three-year cycles starting with fall 2000. By fall 2003, new undergraduate enrollments should be stabilized at 1,600 to 1,650 students per year. Inquiry bases should grow to 50,000 by 2003 - 2004. By fall 2005, minority enrollment will

be 20% higher than in fall 2000. Female enrollment will increase by 10% by fall 2005.

University Career Center

The University Career Center is responsible for career development and employment. Its mission is to assist students and alumni with the life long learning process of career development and to be a facilitator to corporations in their search for highly educated and motivated graduates.

Supporting this effort is a staff comprised of an executive director, an associate director, a computer information technology specialist and four staff assistants providing the daily assistance necessary for the smooth operation of the Career Center.

During the period 2000-2010, the Career Center's objectives are:

- 1. In support of A&M Goal 5, increase student participation in the Co-op program to 1000 students, targeting completion in June 2005.** The trend within Corporate A&M is to hire a greater percentage of employees for full time positions through internal feeder programs.
 - Establish a full-time Director of Cooperative Education position, Fall 2001
 - Develop a marketing plan to attract corporate participation
 - Aggressively promote the advantages of coop education on-campus
 - Develop university policies/procedures that assure ease of transition between the classroom and industry
- 20 Develop specific Career Center programs designed to serve our alumni population, by Spring 2001 (supports A&M Goal 6).** Opportunities exist to expand Career Center Services to our growing alumni population through collaboration between the Career Center and the Alumni Association.
 - Promote the availability of a separate Career Connections alumni database to alumni and corporations, Spring 2001
 - Offer an alumni job search seminar (off-campus site), Fall 2001
 - Add an alumnus to the Corporate Advisory Board, Summer 2000
- 30 Develop a program for tele-interviewing for the Career Center, Fall 2001 Program Category.** Integrate Career Center data gathering into the telemarketing program (job placement statistics, salary offers, previous coop experience, etc.)
 - Estimate costs to implement
 - Develop a list of questions necessary to gather the data
 - Determine the optimum calling time frames

In the minds of parents and students the most tangible measure of success is employability. The Career Center has developed a core of loyal industrial supporters who value the quality of our graduates and trust the university to meet their employment needs. A major aim over the planning period will be to build on this base to meet the changing degree mix of Michigan Tech and to seek out opportunities for career-long involvement with graduates.

Performance Measurements:

- 10 Increase student participation in the Co-op program to 1000 students by June 2005
 - a. At current student participation, target is 100 new students each year.

- b. Corporate sponsorship should be 350 corporations, an annual growth of 50 corporations.
- 20 Develop specific Career Center programs for our alumni population, Spring 2001
 - a. Target 1000 alumni registered on Career Connections by 2003.
 - b. Program should be funded by user fees.
- 3. Develop a program for teleinterviewing for the Career Center, Fall 2001
 - a. Two years after implementation response rate of graduates should be 65%.

University Relations

This group is responsible for managing the University's image through print and multimedia communications. Its mission is to proactively support Michigan Technological University's mission, vision, goals, objectives, and strategies by providing public relations counsel and internal and external communication vehicles to increase awareness of the University and promote positive behaviors toward MTU and its key publics. Its vision is to create and continuously improve Michigan Tech's image through targeted communications that expand and open markets.

The department has four operational units:

News and Information Services - internal and external press, publications and multimedia fee based publication designs, photos, Web and printing **Marketing**

The central goal of University Relations is to manage the image of the University with external and internal publics. During the 2000-2010 planning period, major University Relations objectives are

- 10 Improve the consistency and quality of the University's message and image (supports A&M Goal 3).** The demands of our publics will shift from being passive receptors of University information to individuals demanding a dialog—interactive and personal.
- Invest in enhanced Web Marketing Communications.
 - Develop a database and generate personalized interactivity, create the fourth generation Web site, produce a Web product that will attract and hold customers.
 - Hire technically trained Internet Marketing Manager (Sept 2000).
 - Increase the regional, statewide and national visibility of Tech as a national research university.
 - Develop personalized/targeted marketing at Michigan Tech.
 - Develop customized two- and four-color publications designed to meet the individual needs and interests of potential students and faculty, research agencies, corporations, and donors in order to build relationships with the University.
 - Hire Database Administrator (Sept 2000) to library and retrieve the ever-increasing number of digital image and text files for current publications and to prepare for the advent of customized printing in 2003.
 - Provide a fifty percent match to University Relations funds to purchase a ChromaPress (or comparable equipment) capable of high-quality personalized printing (2003).

- 20 **Continue advertising program to support student recruiting goals and increase awareness of Michigan Tech as a top-quality national university (supports A&M Goal 2).**

Alumni Relations

AR is primarily responsible for the development of lifelong, mutually beneficial relationships with alumni and friends of the institution worldwide. AR plays an integral role in the development of relationships which foster increased connectivity with the campus community and the University's alumni constituency worldwide.

The Association staff is comprised of the Executive Director, a staff assistant and a clerical person. The Alumni Office is also responsible for the management and development of University Special Events (commencements, convocations, building dedications, etc...). The Special Events Office is staffed by the Special Events Coordinator and a staff assistant.

During the period 2000 - 2010, the Alumni Relations Office objectives include:

1. Develop relationships with the University's constituency worldwide.
 - More meaningful communications with our constituency (ALUMNUS, regular e-mail updates, lifetime e-mail address, career days and job fairs, etc...)
 - Review alumni homepage every quarter
 - Visit with academic departments once per year
 - Conduct one international alumni event per year
2. Host special events.
 - Increase success of Alumni participation by 10% per year with the annual Reunion, Homecoming, Winter Carnival, Commencements, Spring Fling, travel programs, others...
 - Develop programming in primary chapter areas recognizing various demographics, affinity.
 - Increase the quality of special events through quarterly evaluations with the Special Events staff. Survey a sample of prior year participants to test event quality.
3. Improve the Alumni Relations Office financial health through varied revenue generating opportunities.
 - Have 10,000 paid members by 2002 and 15,000 by 2005.
 - Expand marketing revenue to \$100,000 per year by 2002.
 - Increase the direct philanthropic support of alumni programs by 10% per year.
 - Each year the Alumni Association will have a balanced budget.
4. Build key leaders at chapters around the world.
 - Embrace a lifelong relationship model. Develop a plan for primary, secondary and tertiary chapters by 2001.
 - Involve leadership at the chapter level with Boards, Academy's, etc... on campus. Evaluate baseline in the fall of 2000.
 - Develop leadership at eight primary chapter areas by 2002.
5. Development of chapter charters which increase the linkages between chapter leadership and the entire campus community.

International Advancement Program

IAP cultivates and stewards relationships with Michigan Tech's international alumni and friends. The current staff includes a Director (full time, exempt, general fund) and an Administrative Associate (full time, exempt, general fund). Student assistants are utilized as available and appropriate to assist in various capacities. IAP utilizes Michigan Tech's strengths to

market the University to the international community. IAP's mission is to develop previously untapped international resources to support the University's vision.

During the period 2000-2010, objectives include:

1. Cultivate and steward international alumni and friends (supports AM Goal 1, 2 and 3).
 - Country-specific email listserves established to facilitate alumni communication for each country visited (grow 2 countries per year starting in 2002)
 - Interactive web site (submitted proposal to Internationalization Initiative) (2003)
 - Update bio-records with contact information for 500 "lost" alumni and friends (by 2002)
 - Plan and execute 3 international alumni initiatives per year, such as the Presidential Roundtable events (2003)
2. **Maintain regular contact with alumni and friends** (supports AM Goal 1, 2, and 3).
 - Horizons Newsletter - quarterly, both printed and electronic (ongoing)
 - IAP director to act as moves manager for 40 affluent prospects
 - General contact active international alumni and friends a minimum of twice a year using solicitation and stewardship process (holiday greetings, special occasion remembrances, etc.) that utilizes electronic or printed material (now 250 contacts, grow to 500 by 2003)
 - Coordinate 25 visits by faculty volunteer cultivators and other Michigan Tech representatives with alumni while on international travel (2003)
3. Develop an information system for understanding alumni and friends (AM Goals 1, 3).
 - Utilize surveys and questionnaires developed by IAP to address the unique aspects of the international audience to obtain a baseline picture of Michigan Tech's international alumnus (2003)
 - Provide appropriate information on international alumni and friends (such as research interest, continuing education needs) to other University units (2004)
 - Coordinate with appropriate MTF units to maintain contact reports from 25 volunteer cultivators mentioned in Item 2 (2003)
 - Establish an international resource network (faculty, international students, key alumni and friends) database to be available as a key information resource. Collaborate with Corporate Services to use TRACR as the database backbone (2003)
4. **Develop a process for identification and cultivation of international alumni, corporations, foundations and governmental units** (supports AM Goal 1, 2 and 5).
 - Establish an information resource of materials providing information on international alumni demographics and cultivation opportunities (2004)
 - Work with MTF units to improve acquisition of international information resources and develop internal processes to identify "lost" Michigan Tech alumni and friends (2006)
5. **Develop coordination with other Michigan Tech units** (supports AM Goal 5).
 - Conduct quarterly International Advisory committee meetings (2003)
 - Identify and develop two collaborative programs that benefit the international constituency (similar to the success of the "Experience MTU" program) with appropriate Michigan Tech units (2004)
 - Establish an international student alumni chapter to provide students the opportunity for leadership development utilizing the International Club and other international student groups (2004)

Short-term performance metrics: Years 1 through 3

- International donations will increase 25% per year
- Establishment of 5 active alumni chapters that each have a minimum of one activity per year
- Addition or update of 500 alumni records
- Plan and execute 5 international events

Long-term performance metrics

- International donations will increase by 58% per year
- Establishment of 2 new alumni chapters per year
- Addition or update of 500 alumni records
- Plan and execute 10 international events
- Providing information to appropriate University units to access student recruitment volunteers
- Communication will be maintained with international alumni and friends a minimum of twice yearly

2010

- International alumni giving goal is to reach \$1 million per year
- A virtual alumni association will be established involving a minimum of 16 chapters
- International events, such as visits to the campus, will be a routine University activity
- Addition or update of 1000 alumni records
- Communication will be maintained with international alumni and friends on-demand by use of an electronic network
- An international student alumni association will be active in providing services to the international community and developing alumni leaders for the future
- IAP will be an active member of the International Advisory Committee, where requirements of the international community will be identified and addressed in a coordinated manner, which maximizes the use of University resources

Corporate Relations

Coordinates the cultivation of corporations for involvement with the University. Its mission is to draw all elements of the University into a “one-stop shop” for corporate interactions. It does this by cultivating, monitoring and stewarding relationships of mutual benefit to corporations and Michigan Tech, resulting in greater intellectual, physical and financial resources for the University.

Housed in Corporate Services, the corporate relations program participants include half-time effort of the executive director corporate services, 3/4-time effort of the associate director of corporate services, a full-time manager of corporate partnerships, and 1.5 FTE support staff. A technology commercialization director is forecasted to be added late in FY 99/00 who will be 25% allocated in support of the corporate relations program. The executive director of corporate services oversees corporate relations activities, including cultivation of key clients and provides leadership for key strategic direction. Together, the executive and associate directors maintain a portfolio of the top 25 corporate clients of the University. The manager of corporate partnerships provides day-to-day management of complex corporate partnerships. The technology commercialization director’s role will be to encourage philanthropy among companies that have intellectual property licensing and technology partnerships with Michigan Tech. The support staff serve the general office support needs of the program, and assist/manage gift acknowledgments, property recording, office accounting and other core operating functions.

During the period 2000-2010, corporate relations program objectives are as follows:

1. Develop and steward corporate partnerships using the Ford/Michigan Tech Business Plan as a model (supports A&M Goals 3, 1, 4 and 5).
 - Add at least one new partnership each year with value of \$250K per year.
 - Continue to steward existing partnerships.
2. Technology, Research, and Capabilities Resource™ (TRACR™) information and management system (**supports A&M Goals 3, 1, 4 and 5**).
 - Launch by 2000 as a first Web management tool for coordinating research into technology focus areas and Web marketing tool for “high-tech” awareness and building partnerships

- Add corporate partnership stewardship, campaign management, marketing features (2001)
 - Add educational and lab capabilities management and marketing features (2002)
 - Launch corporate prospect and document management features (2003)
 - Launch diversity and student success management and marketing features (2004)
3. Coordinate campus constituencies for corporate cultivation (**supports A&M Goals 3, 1 and 5**).
- Conduct quarterly corporate prospect meetings with MTF development officers
 - Conduct semi-annual program planning meetings with Alumni Association director
 - Establish program support processes with Enrollment Management, International Programs, and the Career Center by 2002
 - Establish liaison relationship with faculty/staff senate (ongoing)
 - Assist colleges and departments with corporate program planning (ongoing)
 - Continuously support diversity and student design fund raising efforts
 - Continuously collaborate with University Relations for Web and print materials for corporate cultivation
 - Assist president's officer in coordination of and program planning for advisory boards
4. Increase corporate gifts to Michigan Tech (**supports A&M Goals 1, 3 and 5**).
- Hire corporate development officer (2000)
 - Increase number of corporations being cultivated to 200 by 2003 through increased calls by corporate programs personnel and through calls by campus and MTF staff.
 - Increase corporate gifts/pledges by \$2,000,000 by 2002.

Intellectual Property and Technology Commercialization

Housed in Corporate Services, this program focuses on the protection and marketing of intellectual property developed at Michigan Tech. Consistent with the University vision and A&M Goal 4, the Intellectual Property and Technology Commercialization (IPTC) mission is to market Michigan Tech's research enterprise through competitive intellectual property and technology commercialization programs that ultimately expand Michigan Tech's affluence and influence.

In addition to managing patents and licensing, IPTC 1) encourages participation in patent and commercialization processes, 2) protects University interests, and 3) facilitates Michigan Tech research enterprise growth. Appendix 1 provides a summary of work products of IPTC, and also shows our plans for transforming IPTC into a technology marketing and business plan driven organization. This plan provides for growth in the volume of service, improves efficiencies of delivery, outsources the trademark program, grows the staff and increases the emphasis in asset generating activities from 47% to 59% of total staff effort. This transition will be completed by 2001.

Current staff allocations include half-time of the executive director of corporate services, a full-time intellectual property administration director, a full-time temporary licensing assistant, and 1.0 FTE support staff. By 2001, this allocation will change to 0.45 FTE of the executive director of corporate services, 0.25 FTE of the associate director of corporate services, a full-time intellectual property administration director, a director of technology commercialization, 1.9 FTE support staff, and an estimated 1.0 FTE outsourced (trademark program).

During the period 2000-2010, IPTC objectives are as follows:

1. Assure IPTC activities have the greatest potential to result in royalties and research contracts (supports A&M Goal 4)
 - Launch a business plan driven IPTC work process connecting evaluation and selection of invention disclosures for patent protection, marketing, investment, and licensing (2000)
 - Establish external Technology Commercialization Advisors Network (2000)
 - Retain a General Intellectual Property Counsel (2000)
 - Establish management/administrative and accounting processes to steward new IPTC work process (2000)
 - Update/create Web information resources and seminars to educate researchers (including students) about IP and copyright processes, benefits and obligations (2001)
 - Recommend modifications to Board of Control IP policy to accommodate a business-plan emphasis and flexibility for student-based design activity (2000)
2. Market Michigan Tech's intellectual properties and technology development capabilities (supports A&M Goals 4 and 5)
 - Launch TRACR version 1.0 as a first Web management tool for coordinating research into technology focus areas and Web marketing tool for "high-tech" awareness and initiating technology partnerships (2000 - see Corporate Relations section)
 - Hire technology commercialization director to solicit and secure commercialization and research investments, and develop strategic collaborations with the State, other Universities, entrepreneurs and private industry (2000)
3. Increase Trademark Program Revenues (supports A&M Goal 1)
 - Solicit proposals for program outsourcing (2000)
 - Begin outsourcing (2001)
4. Grow capacity for IPTC revenue generation through internal and external collaborations (supports A&M Goals 4, 1 and 5)
 - Conduct feasibility study for Michigan Tech Enterprise Park (MTEP) (2000)
 - Establish MTEP or functional equivalent (2001)
 - Create strategic relationships with research organizations and corporations (ongoing)
 - In collaboration with CAMMP and academic units, steward strategic alliances with Conoco, Norsk Hydro, CWRT, NCMS, etc (ongoing)
 - In collaboration with CAMMP and academic units, create Ford NVH "virtual research department" (2000)
 - Establish and market program for patent donations (2001)
 - Establish program for business development of major University technology initiatives
 - In collaboration with the School of Forestry, develop business potential of Plant Biotechnology Research Center (begun in 1999)

Historically, Michigan Tech's IP operation has operated in the red. We believe this plan will turn IP into a net revenue generating area for the University by 2004.

Benchmark Schools and Organizations for Best Practice

(A&M Units Indicated - See Table 1 for abbreviations)

Arizona - UR

California-Berkeley - UR

Carnegie Mellon - CC

Central Michigan - UR

Cornell - IA

Dow Chemical - UR

Georgia Tech - EM, CC, AR

Iowa State - MTF, CC

Kettering - EM

Lehigh - UR, IA, CR

MIT - TC
Michigan State - EM, CC, AR
Michigan - EM, CC, CR
Missouri-Rolla - EM, CC
NCMS - TC
RPI - MTF, EM, UR, AR, IA, CR, TC

Stanford - IA
Texas A&M - MTF, CR
Virginia Tech - AR
Wisconsin-Madison - TC

Programs/activities we have a good base in that could be expanded

Table 3 summarizes these programs and proposed funding sources. Figures shown in parenthesis are resources anticipated to be obtained from sources external to the University general fund.

Table 3: Incremental A&M Program Summary (\$1,000's)*

Description	MTU General Fund			External Funding				Incremental Outcome
	00/01	01/02	02/03	00/01	01/02	02/03	Source	
MTF staffing increases					200	210	MTF	Increase gifts from planned givers and engr alumni
MTF Web, computer and finance system improvements				800	100	100	MTF	Increased gifts via quicker, more effective communications to univ. leadership and donors
EM direct mail, publications, student searches, telemarketing, technology improvements	190	190	190					Increased, targeted and more diverse enrollment (SS&E increase and marketplace salary adjustment for 6 professionals also needed)
CC staffing increases - asst dir (2000), co-op dir (2001)	48	110	115					Increase corporations to 350, co-ops to 1000 and 1000 alumni using service
CC tele-interviewing support		6	6					Increased interviews and better corp retention
UR enhanced Web marketing		120	120					National recognition, enhanced fund-raising, friend-raising and student enrollment
UR personalized marketing		50	50					National recognition
UR personalized press equip		175						Enhanced fund-raising, friend-raising and student enrollment
UR advertising (current market)		275	275					Increased enrollments
UR advertising (central and southern Michigan)			1,400					Higher quality enrollment via increased pool, increased downstate and national awareness
AR staffing increases				150	155	160	MTF	More Alumni Assoc membership and donations
IA staffing and international travel/programs (admin asst and SS&E)	35	86	88					More donations and international students
IA international Web site	80	60	60					More donations and international students

Table 3 (continued) Description	MTU General Fund			External Funding				Incremental Outcome
	00/01	01/02	02/03	00/01	01/02	02/03	Source	
CR staffing increase				110	114	118	MTF	Increased corporate gifts
CR, TC TRACR info. mgmt and Web marketing system				40	40	40	MTF	Ability to manage corp partnerships, increased gifts, research contracts, license agreements
TC increase staff (match w/ State) and IP counsel fees	78	83	86	78	78	78	MEDC, Licensees	Increased IP licenses and technology partnerships, improved univ. recognition in Lansing
TC MTEP feasibility study (match)	40			40			Community sources	Consulting contract to perform rigorous feasibility study for Tech Park to generate spin offs, jobs, entrepreneur programs, community partnership
TOTALS (\$1,000's)	471	1,155	2,390	1,218	687	706		

* These programs are listed in the same order that A&M units are discussed in this strategic plan. **They are not prioritized.** Abbreviations at beginning of each description indicates A&M unit responsible for managing activity. Budgets are incremental to FY1999/2000 budgets and do not include normal escalation of existing budgets (e.g. merit pay increases, inflation adjustment)

Programs/activities with no current base that ought to be started and built

While not budgeted in this plan, we believe there are good opportunities for University growth in educational programs, research and fund raising if a permanent southeast Michigan location were established.

The Michigan Technological University Enterprise Park (www.cpas.mtu.edu/mtep) has strong support and could be a great enhancement to the University without significant general fund impact. Our research enterprise could be enhanced with development of a program in external patent procurement and business development. We are sowing the seeds of these programs under the Corporate Services area, although broad and visible University commitment has not been solicited or given.

Areas to be de-emphasized

University Relations proposes shutting down the photo development shop as we anticipate reduced need as digital imaging becomes more prevalent. Corporate Services recommends outsourcing the trademark program as a means to increase net revenue income.

Appendix 1

Intellectual Property and Technology Commercialization Activities

Activity	Internal Full Time Labor Per Year		Activity Type	Description
	Current	Planned		
Employee/Student Proprietary Rights Agreements	0.20	0.40	Service	Handling of all non-standard situations
Material Transfer Agreements	0.15	0.20	Service	Support of ongoing research activities
Faculty Education on Patent Process, etc.	0.20	0.40	Service	One-on-one and general training on patent and copyright processes, preparation of booklets, guidelines and policies
Non-disclosure Agreements	0.60	0.40	Service	Service - facilitate licensing and technology partnerships
Conflict of Interest Cases	0.10	0.20	Service	Service - handling of cases dealing with intellectual property, faculty-owned companies and similar situations
General Internal Reports and other office work	0.60	0.70	Admin	Revenue and cost flows, file and document management, distribution of royalties
Software License Agreements	0.10	0.10	Asset generating	Both donation and non-donation transfers of software require IP and field-of-use articulation
Trademark Program	0.70	0.20*	Asset generating	Annual licensing and product sample review for 160+ vendors
Procurement and Licensing of IP, patents and copyrights	0.50	1.00	Asset and revenue generating	All IP negotiations related to MTU-owned IP to obtain royalties and/or secure research contracts

Marketing of Intellectual Properties and cultivation of technology partnerships	0.35	1.00	Potential asset generating	Business plan development, corporate solicitations, Web marketing, entrepreneur cultivation, venture capital and seed fund raising,
TOTAL	3.50	4.60		

* Plan to outsource the bulk of the trademark program in order to increase its net revenue, anticipating external effort to be 1.0 FTE.