

'Clear'-inghouse data

2009 AIRUM Annual Conference

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Rationale

- National Student Clearinghouse (NSC)
- Student Tracker Data File (NSC file)
- Using Tableau
- Using Operational Data Store
- Extraction, Transformation and Loading (ETL) Steps
- Cognos Reports

National Student Clearinghouse (NSC)

- A non-profit organization which was incorporated in 1993-94
- Provides student degree, diploma and enrollment details to the participating institutions
- The number of institutions participating in NSC is more than 3,300, enrolling 92% of US college students

Student Tracker Data File (NSC file)

- University
- Enrollment beginning and end dates
- Student Status (Full-time, Part-time)
- Degree
- Major

Tableau

Tableau

- Summer 2007
- Cleaning and Transforming NSC data files
- Linking files to the Student Information System (SIS)

Issues with Tableau

- Reinventing the wheel
- New software
- Not supported institutionally
- Create new data files for better performance

Operational Data Store (ODS)

Extraction, Transformation and Loading

Extraction (Step I)

Extraction, Transformation and Loading (I)

- Student Population
 - ✓ All students who applied
 - ✓ All students who graduated
- Create a standard NSC *.txt file which includes SSN, Name, Search Begin Date.
- File type (DA/SE)

Extraction, Transformation and Loading (I)

- Login to your NSC account and upload the *.txt file(s) with the student information.
- A confirmation email will be sent to the email address linked with your account.
- Email notification will be sent once NSC has collected information on the requested students.

Extraction, Transformation and Loading (I)

- Each uploaded file would have three corresponding files:
 - ✓ Student Tracker Data File ←
 - ✓ Aggregate File
 - ✓ Control File
- Save the *.csv file as an excel file (.xls/.xlsm).
- File includes enrollment data and graduation data (if any) for all students in the NSC database.

Extraction, Transformation and Loading

Transformation (Step II)

Extraction, Transformation and Loading (II)

- Pull out graduation information in a new excel file.
- Convert enrollment dates to term codes (e.g. Fall 2008 → 200840) using excel macros.
- Create unique tuples per student ID, per term code, per school (delete redundant data based on ID, term and school).

Extraction, Transformation and Loading

Loading (Step III)

Extraction, Transformation and Loading (III)

- Upload cleaned and transformed excel files in custom tables with the ODS supported by the institution.
- Uploaded tables can then be accessed through the report writing tools. (Cognos BI Suite, MS Access, MS Excel)
- Create Cognos reports.

Benefits of using ODS/Cognos

- Supported by the institution
- Tools are well documented
- Forums (www.ittoolbox.com)
- Tool upgrades
- Easy linkup with SIS
- Experience using the tools

Cognos Reports

Attendance Pattern for non-Enrolled Students Submitting an Application to UST - Undergraduate

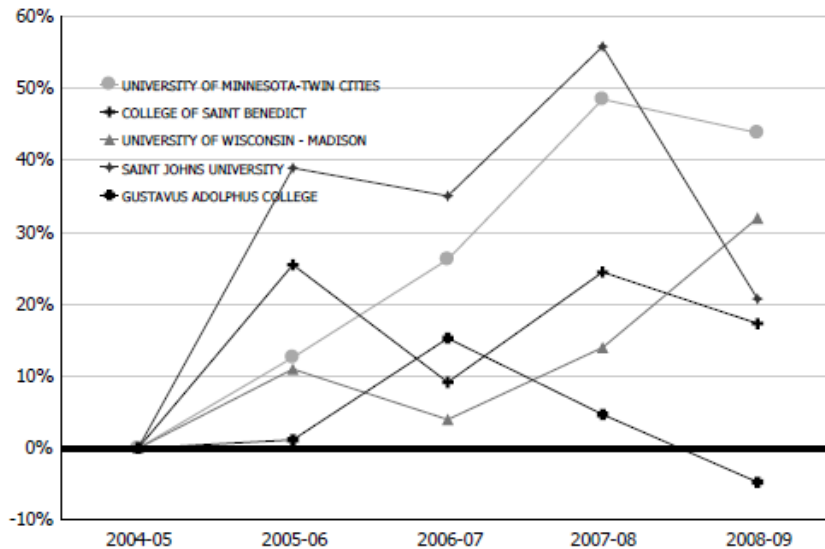
Application and Enrollment Trends

2004-05			2005-06			2006-07			2007-08			2008-09			Applied Total	% Admitted	% Enrolled
Applied	Admitted	Enrolled	Applied	Admitted	Enrolled	Applied	Admitted	Enrolled	Applied	Admitted	Enrolled	Applied	Admitted	Enrolled			
5,240	3,869	1,491	5,914	4,413	1,789	6,324	4,507	1,751	6,620	4,579	1,787	7,117	4,838	1,796	31,215	71.1%	27.6%

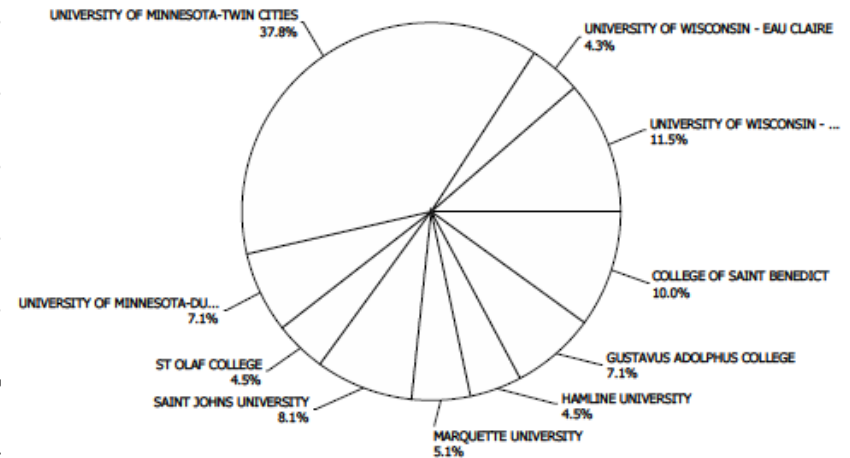
Five-Year Trend

	2004-05		2005-06		2006-07		2007-08		2008-09		Total		Average Annual Attendance	% of UST Admits	Median Annual % Change
	Accepted	Denied	Accepted	Denied	Accepted	Denied	Accepted	Denied	Accepted	Denied	Accepted	Denied			
UNIVERSITY OF MINNESOTA-TWIN CITIES	301	51	339	61	380	95	447	106	433	79	1,900	392	380	8.56%	12.36%
COLLEGE OF SAINT BENEDICT	98	1	123	6	107	9	122	5	115	4	565	25	113	2.54%	4.14%
UNIVERSITY OF WISCONSIN - MADISON	100	0	111	3	104	2	114	4	132	3	561	12	112	2.53%	10.31%
SAINT JOHNS UNIVERSITY	77	4	107	4	104	11	120	10	93	9	501	38	100	2.26%	6.29%
GUSTAVUS ADOLPHUS COLLEGE	85	2	86	7	98	13	89	15	81	18	439	55	88	1.98%	-3.91%
UNIVERSITY OF MINNESOTA-DULUTH UNDERGRADUATE	44	15	62	16	73	39	77	44	81	32	337	146	67	1.52%	11.61%
HAMLIN UNIVERSITY	79	28	61	26	61	33	73	53	52	71	326	211	65	1.47%	-11.39%
ST OLAF COLLEGE	62	1	63	4	66	6	44	5	52	1	287	17	57	1.29%	3.19%
MARQUETTE UNIVERSITY	50	1	57	6	57	4	49	5	59	10	272	26	54	1.22%	7.00%
UNIVERSITY OF WISCONSIN - EAU CLAIRE	52	1	45	3	50	4	44	7	49	4	240	19	48	1.08%	-0.44%
Other	1,177	456	1,406	517	1,478	713	1,422	806	1,335	663	6,818	3,155	1,364	30.71%	0.70%

Percent Change - Accepted Students (Top Five)



2008-09 - Accepted Students (Top Ten)





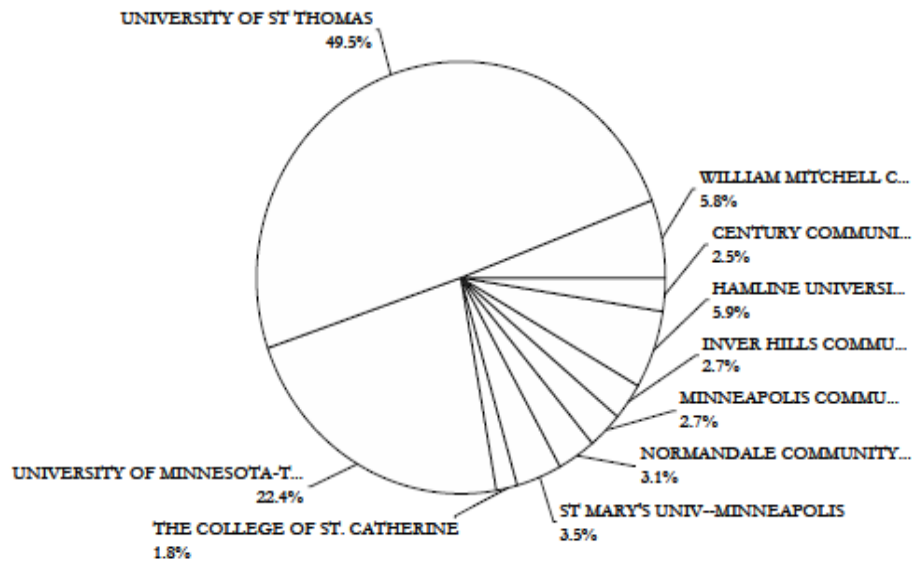
Enrollment/Graduation Pattern of Students Graduating From UST

Please Make your Selection: --> Undergraduate

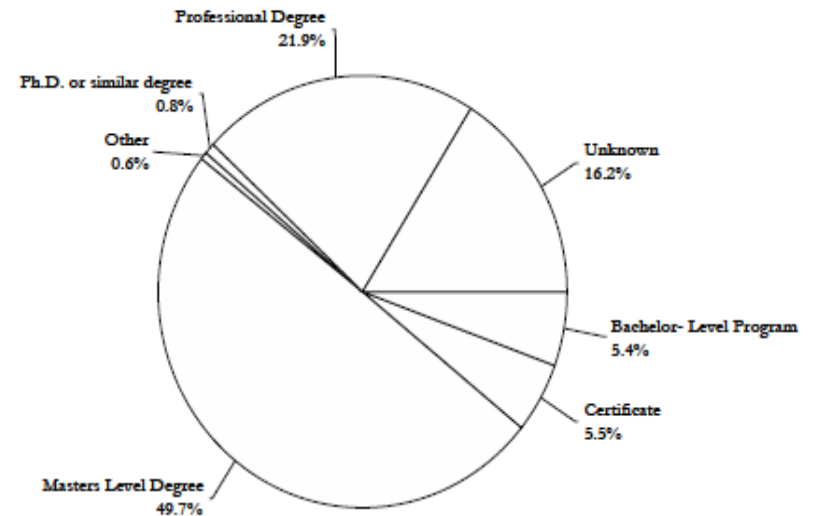
Nine-Year Trend

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Graduated from UST	870	897	986	996	1,054	979	1,073	1,080	1,031
Enrolled after graduating from UST	410	446	440	412	447	350	355	275	172
Graduated from another program	220	227	221	193	161	126	80	29	6
% of Students Enrolled	47.1%	49.7%	44.6%	41.4%	42.4%	35.8%	33.1%	25.5%	16.7%
% of Students who Graduated from another Program	25.3%	25.3%	22.4%	19.4%	15.3%	12.9%	7.5%	2.7%	0.6%

Top Ten Universities



Degree Category (as a percent)



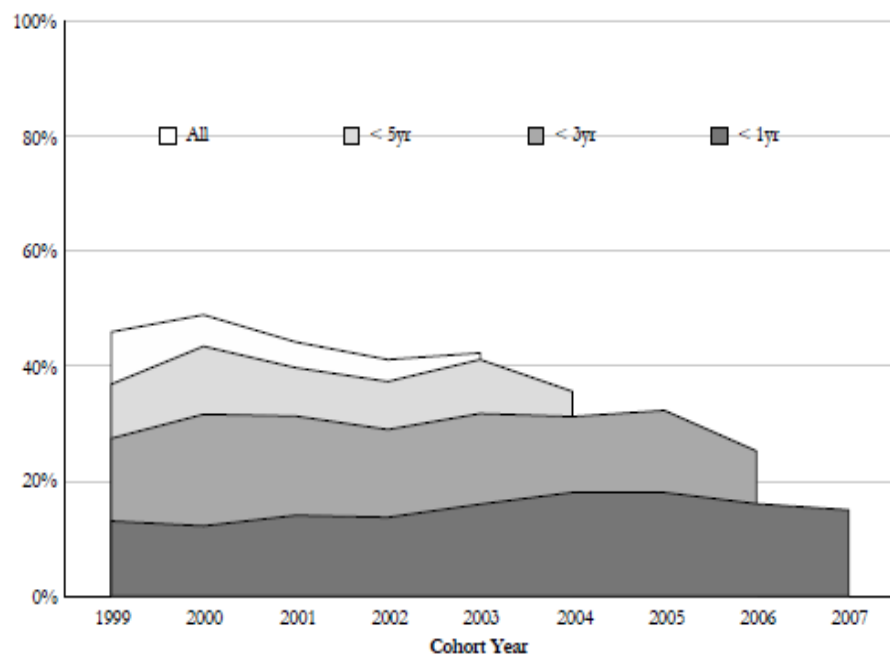
Enrollment Pattern of Students Graduating From UST

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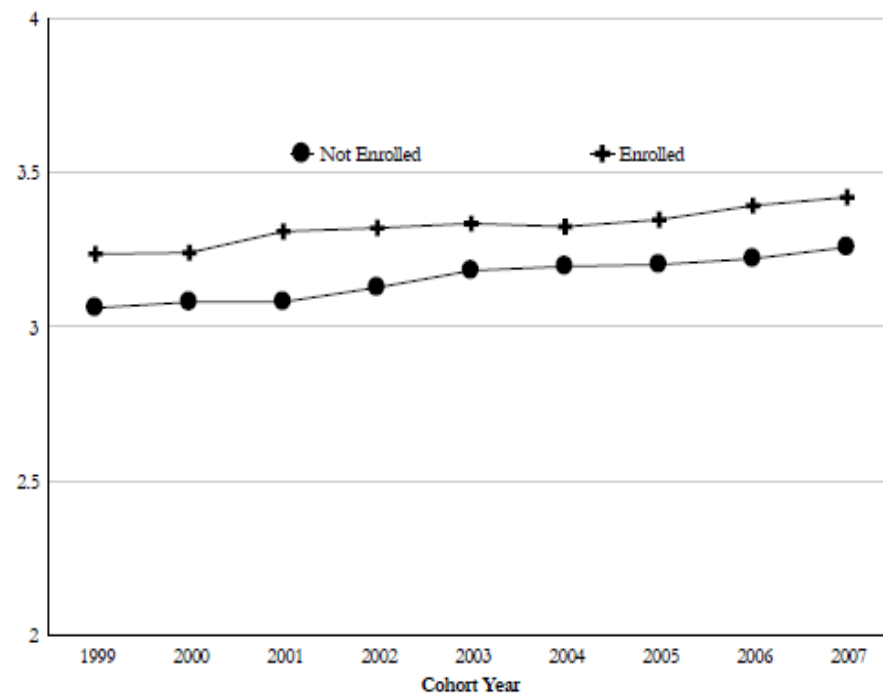
Top Ten Colleges

	1999	2000	2001	2002	2003	2004	2005	2006	2007
UNIVERSITY OF ST THOMAS	105	115	97	102	143	117	122	96	58
UNIVERSITY OF MINNESOTA-TWIN CITIES	53	75	67	61	62	36	41	21	16
HAMLIN UNIVERSITY	20	15	13	12	22	16	3	9	3
WILLIAM MITCHELL COLLEGE OF LAW	16	14	11	18	13	9	3	18	10
ST MARY'S UNIV--MINNEAPOLIS	11	12	11	8	10	8	2	3	2
NORMANDALE COMMUNITY COLLEGE	6	10	9	8	9	3	7	6	2
MINNEAPOLIS COMMUNITY AND TECHNICAL COLLEGE	10	5	9	4	2	8	12	1	2
INVER HILLS COMMUNITY COLLEGE	4	7	14	2	5	7	5	7	1
CENTURY COMMUNITY & TECHNICAL COLLEGE	10	5	4	4	8	5	5	5	3
THE COLLEGE OF ST. CATHERINE		5	5	8	4	5	3	3	2
Other	175	183	200	185	169	136	152	106	73

Enrollment within years (as a percent)



Average GPA

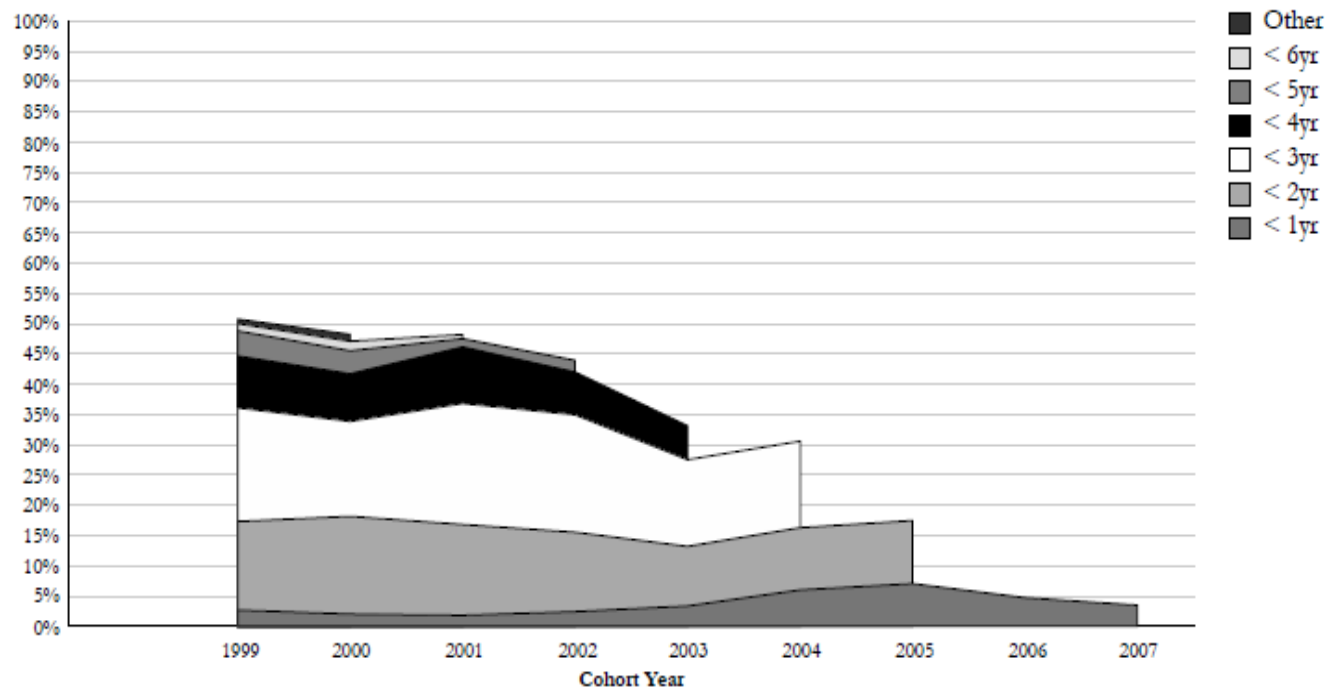


Enrollment/Graduation Pattern of Students Graduating From UST

Please Make your Selection: --> Undergraduate

	Degree Category								
	1999	2000	2001	2002	2003	2004	2005	2006	2007
Other	3	1	1		2	1			
Ph.D. or similar degree	1	2	2	5	1				
Unknown	42	35	33	29	18	28	19	4	1
Certificate	8	9	8	11	13	6	12	2	
Bachelor- Level Program	11	15	11	6	6	11	5	5	
Masters Level Degree	115	134	116	102	68	45	34	18	5
Professional Degree	43	34	53	43	54	37	12		

Graduation Rate



Detriments

- Degree Types
- Classification of Instructional Programs (CIP) codes
- No Degree/Major information for enrolled students
- Redundant data (based on Term, Student ID and School ID)
- No more than 5,000 students in upload file

Office of Institutional Research and Analysis Mission

The central mission of the Office of Institutional Research and Analysis is the collection, organization, analysis, and dissemination of internal and external data sources to support institutional management, planning, operations, decision-making, and assessment functions at the University of St. Thomas.

Questions??