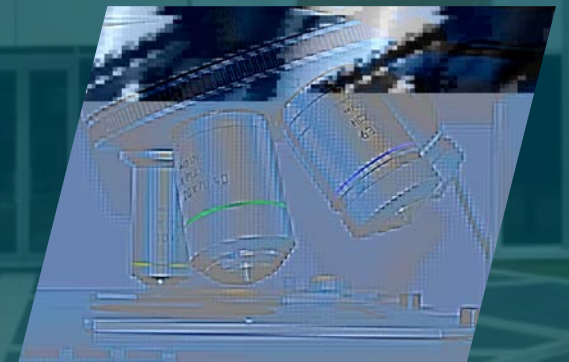
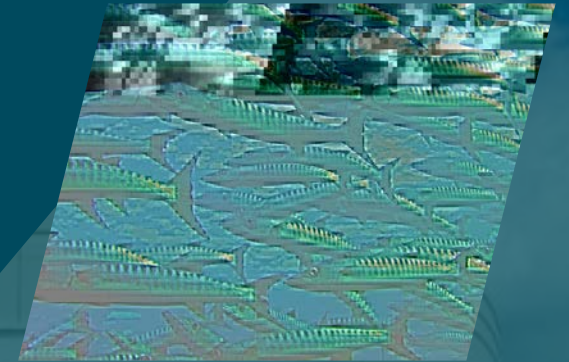


Not Quite a Higher Ed Study: Economic Impacts of a Research Center

A Presentation to the
REMI Users Group

Jim Robey, Director, Regional Economic Planning Services
W.E. Upjohn Institute for Employment Research

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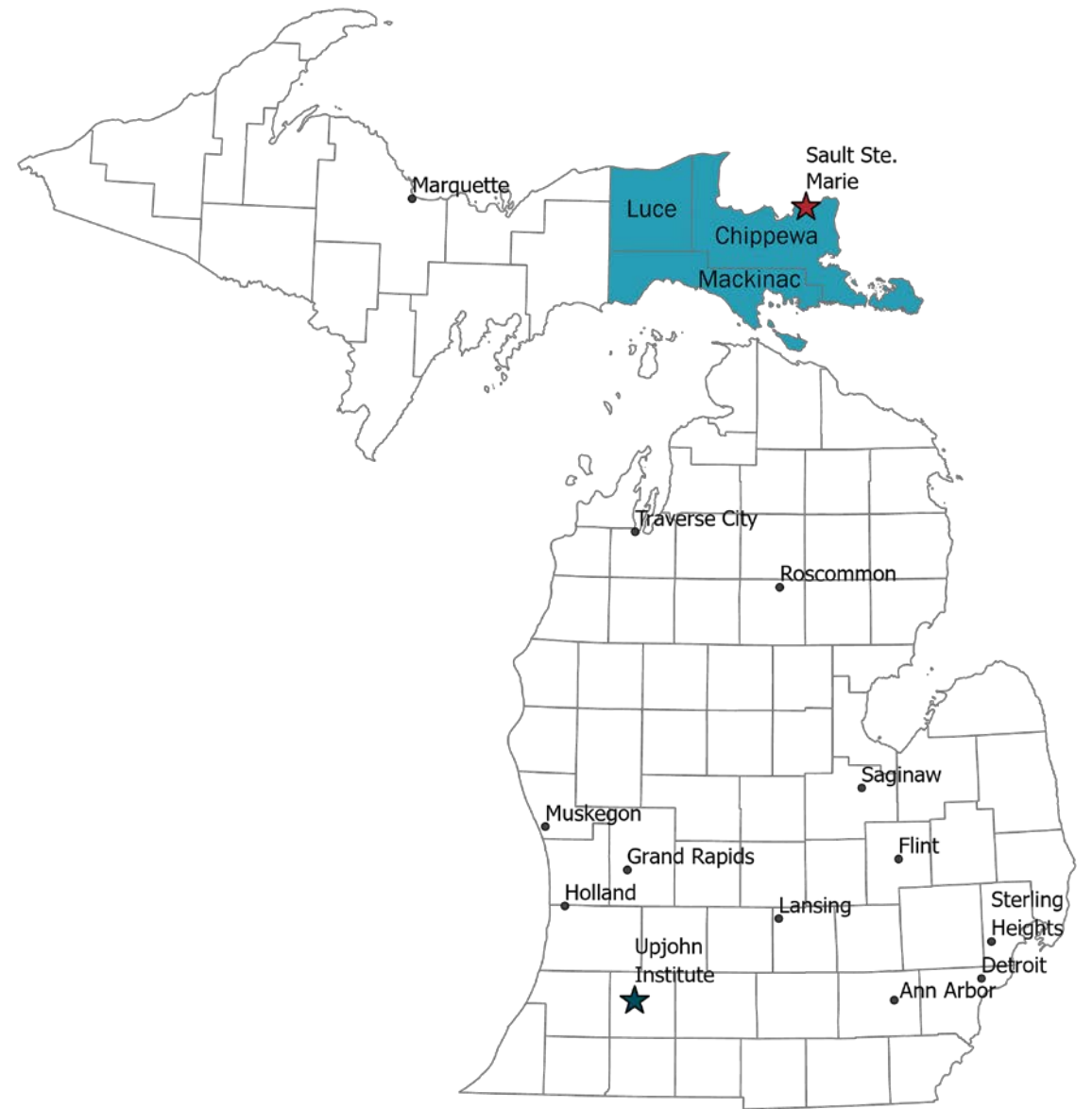
The Project



The Project

- **Client:** Lake Superior State University
- **Purpose:** secure U.S. Department of Commerce Economic Development Administration (EDA) funding
- **Activity:** build a research center at a university that fills multiple roles
- **Study area:** three counties of eastern Upper Peninsula of Michigan
- **Description:**
 - The estimated costs of the base project are currently \$14.2 million for horizontal and vertical construction
 - The project is 12 months of construction and 10 years of operations
 - This project straddles functions; it is a research center that has academic functions as well as elements of community and visitor impacts

The Study Region



There are Multiple Components to the Project but its not a complete university

- Year 1:
 - Center Construction
 - Land
 - Site prep and infrastructure
 - Soft costs
 - Center staff
 - Buildout
 - Lab equipment
- Center operations



Why isn't this a simple higher ed study? A bit more breakdown

- Construction
 - Build out
 - Staffing
- Operations: day to day
- Academics: teaching
- Students: off campus spending
- Research: funded research and visiting scholars
- Visitors: not the typical visitors to a campus

Project Components Continued: Operations for Years Two through Eleven

- All of the impact estimates are based in estimates/forecasts
 - A number of escalators are included, examples of which include:
 - Center staff growing from 16 in Year One (Y1) of operations to 35 in Year Ten (Y10)
 - Y1 grants account for \$2.7 million and four scientists and in Y10 grants for \$4.3 million and ten scientists
 - Y1 visitors are forecast at 15,000 with growth to \$75,000 by Y10
 - Student growth from 25 in Y1 to 300 by Y10

Inputs into REMI

		YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
Construction	Project Funding (\$14.2 million)	\$14,200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Road to the Center	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Land Purchase	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Equipment for Labs (Grant)	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Early Designs to Architect (pre-2018)	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	LSSU Personnel Time (One Year)	\$90,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operations	Center Staffing (Number)	0	16	23	25	28	29	29	32	33	35
	Visiting Scientist Nights	0	480	720	720	960	960	960	1,200	1,200	1,200
	Visitors (Number)	0	15,000	30,000	50,000	50,000	75,000	75,000	75,000	75,000	75,000
	New Students (Number)	0	25	50	100	150	200	225	250	275	300
	Operational Expenses										
	Salary & Fringes - Manager & 10 Students	\$0	\$98,800	\$100,776	\$102,792	\$104,847	\$106,944	\$109,083	\$111,265	\$113,490	\$115,760
	Supplies & Equipment	\$0	\$9,155	\$9,338	\$9,525	\$9,715	\$9,910	\$10,108	\$10,310	\$10,516	\$10,727
	Travel (In-State)	\$0	\$1,500	\$1,530	\$1,561	\$1,592	\$1,624	\$1,656	\$1,689	\$1,723	\$1,757
In-kind contributions											
Cloverland Electric (Heat, Space)	\$0	\$20,000	\$20,400	\$20,808	\$21,224	\$21,649	\$22,082	\$22,523	\$22,974	\$23,433	
MI Department of Natural Resources (Food, Service)	\$0	\$5,000	\$5,100	\$5,202	\$5,306	\$5,412	\$5,520	\$5,631	\$5,743	\$5,858	

Outputs from REMI

Estimates of results from all inputs

		Build	Operations									
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11
All Activities; Eastern Upper Peninsula	Total Employment	201.5	65.0	99.2	139.8	162.8	210.2	223.9	239.7	252.4	264.0	267.4
	Private Non- Farm Employment	184.1	51.7	85.1	122.3	141.8	183.8	193.6	206.0	215.6	224.5	225.8
	Gross Domestic Product*	\$14,900	\$5,300	\$6,400	\$8,900	\$10,600	\$13,800	\$15,400	\$17,000	\$18,400	\$19,800	\$20,800
	Output*	\$25,700	\$8,500	\$10,200	\$14,300	\$16,800	\$22,000	\$24,500	\$26,800	\$28,900	\$31,000	\$32,600
	Personal Income*	\$8,300	\$3,000	\$4,100	\$5,400	\$6,600	\$8,500	\$9,800	\$11,300	\$12,800	\$14,300	\$15,700

* In 000's current dollars

Dilemmas and Challenges in creating estimates

- Multi-year build costs collapsed into a single year
- No solid pro forma on the operations side
 - Costs based on regional federal per diem
 - Visitors were based on experience at other eastern UP attractions
 - Escalators were based on a consensus of researchers and client/partners
 - Substitution effect is always tricky with academic places
 - Estimating student spending is always a little murky (we couldn't survey)
- We don't know the long run impacts of the evolving national baselines as we muddle through COVID-19

Dilemmas and Challenges in creating estimates, continued

- Impact estimates were provided for all inputs and also broken out by category
- No one ever has enough time (or money) for creating these estimates
- We did have a great client
- People use these as part of justification, documentation, dotting the “i”s and as a defense in grant and funding applications with your name on it

Questions?

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