

Executive Board Meeting

May 9, 2013

Engineering Admin Building

Room 101



Welcome!

Dr. Martin Lipinski

Director Emeritus



University of Memphis Update

Dr. Andy Meyers

Vice-Provost for Research

Herff College of Engineering Update

Dr. Eugene Eckstein
Interim Dean

Strategic Plan

Dr. Martin Lipinski

Director Emeritus

IFTI Vision

The vision is that IFTI will be a nationally recognized leader in linking **people** to **solutions** in freight and logistics through research, education and technology transfer activities.

Research Objectives

- Perform cutting-edge freight transportation research of regional and national significance
- Establish cooperative research programs with other leading universities
- Concentrate transportation and transportation related research to policy, modeling, simulation and sustainability
- Support private sector research initiatives

Research MOS*: 2013 Update

Topic	2012	2013	2015	2020
Funded Faculty Researchers	6	10	8	14
Research Projects	7	9	13	18
Research Funds	\$1 M	\$1.8 M	\$1.5 M	\$2.5 M
Publications/ Presentations	12	12	20	30

* MOS = Metrics of Success

Education Objective

- Foster the educational and professional development of K-12 learners; university undergraduate and graduate students and practicing transportation professionals
- Provide a focus on educational pathways to satisfy industry needs

Education MOS: 2013 Update

Topic	2012	2013	2015	2020
New Funded Faculty	1 part-time Business 1 part-time Engineering	1 Full-Time Engineering Faculty	1 new faculty Business line item 1 new faculty Engineering line item	Full time Business & Engineering Associate Directors New faculty in business and engineering
Funded Students	6 Masters 5 PhD	8 Masters 5 PhD	12 Masters 7 PhD	14 Masters 10 PhD
Student Recruitment Plan	Regional	No Formal Plan	National	International
New Graduate Level Courses	1	0	2	1
Transportation Masters Program	Determine program functionality between Engineering/Business	Started discussion, but limited by time	Offer interdisciplinary transportation masters program	Assign staff member to manage administrative demands
Transportation Undergraduate Program	Explore interdisciplinary undergrad degree with U College	Talked to U College	Begin offering undergrad degree through U College	U College & Masters Program in Transportation
K-12 Outreach	Expand scope of GEE/TREC to reach rural communities	In Process	Increase racial/cultural diversity in GEE/TREC	Continue ongoing efforts with K-12 programs

Outreach/Tech Transfer Objective

- Educate and engage constituents through significant technology transfer activities and transportation workforce development activities
- Use technology transfer activities to enhance career pathways

Outreach MOS: 2013 Update

Topic	2012	2013	2015	2020
Academy: Offerings	2	2	2.5	3
Academy: Participants	40	24	70	75
Academy: Revenue	\$250 K	\$100 K	\$350 K	\$500 K
Professional Development Courses: Offered	2	0	4	4
PDC: Revenue	\$10 K	\$0	\$20 K	\$25 K
Conferences to Engage Community	6	11	8	10
Seminars/ Symposiums/ Presentations	12	29	24	30
Community Touch Points: # on mailing list	600	750	1000	1500
CTP: News Articles	6	14	18	24
CTP: Total Individual Contacts	16	12 +	16	16

Research Review

University of Memphis

Dr. Mike Golias
Assistant Professor

Intermodal Freight Transportation Institute: Research



Mihalis Golias

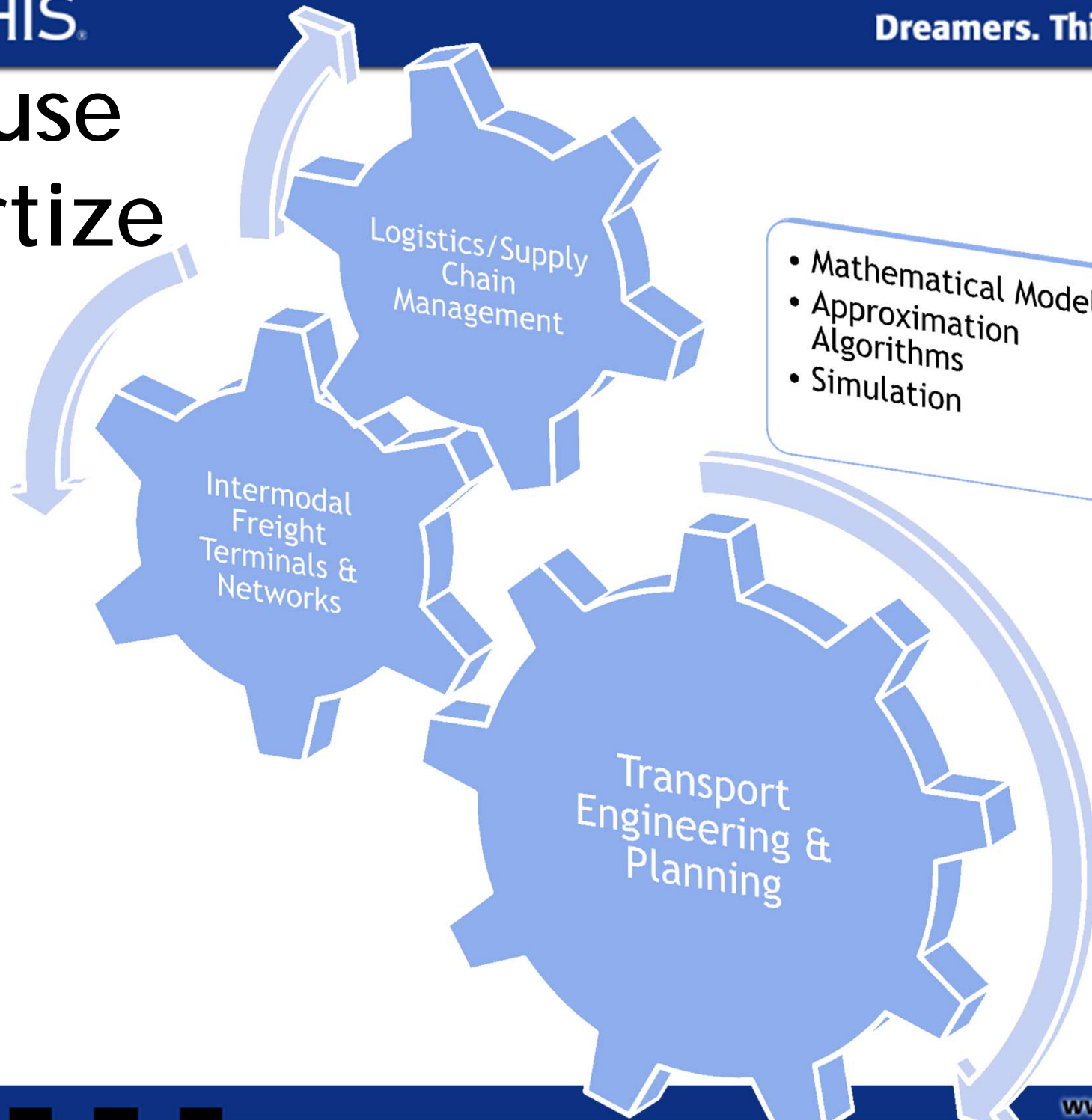
Assistant Prof., Department of Civil Eng.

University of Memphis

05/9/13



In House Expertize



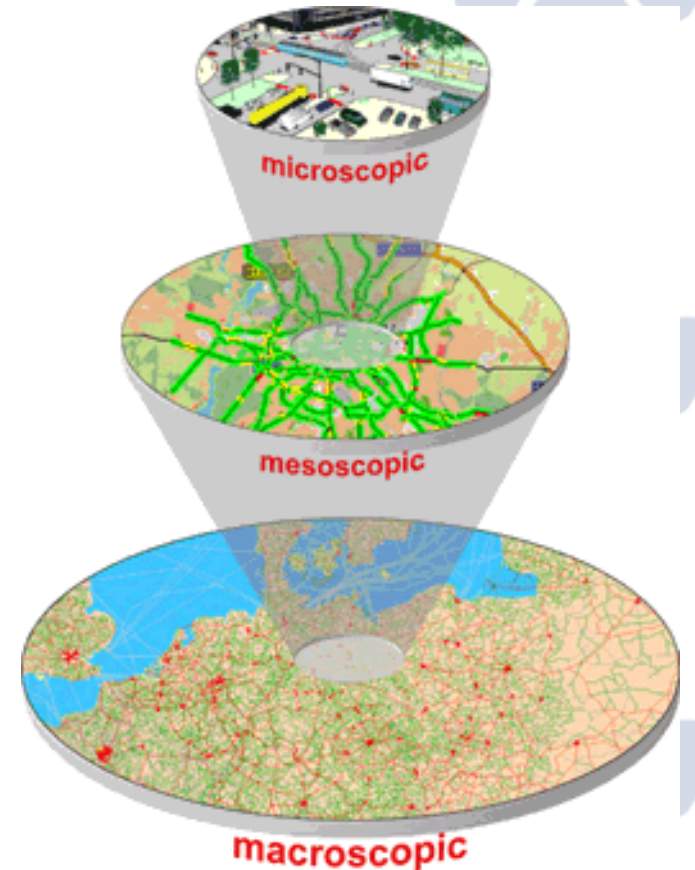
Affiliates

- Civil Engineering
- Mechanical Engineering
- Business & Economics
- Management Information Systems
- Marketing and Supply Chain Management
- Industry (CN, VTG, FedEx, Consultants)



Modeling Capabilities

- Traffic simulation: Macro, Meso, Micro - VISTA (on-line tool), Paramics, VISUM/VISSIM, TransCAD, Synchro
- GIS
- Mathematical Modeling (desktop): GAMS, Matlab, VBA, Custom
- Simulation: Arena, FlexSim, Matlab



Source: <http://www.english.ptv.de>

Project Highlights

- GPS Truck Data For Intermodal Facilities
- Hours of Service Effects
- Rail Crossing Safety Upgrades
- Effects of Panama Canal Expansion
- Lamar Corridor Improvements
- Enhancing Rail Connectivity to Underserved Rural Communities



National Proposal Highlights

- National Transportation Center on Using Multimodal Freight Systems To Increase Economic Competitiveness (3 million) - IFTI Lead of Southern Hub, Sponsor RITA
- Regional Transportation Center on Comprehensive Transportation Safety (2.75 million)- IFTI Co-PI, Sponsor RITA
- TIER Transportation Center on Promoting economic competitiveness and equity through innovative intermodal freight facility planning and management (1.5 million) - IFTI Lead Multiple Universities , Sponsor RITA
- Discovering vulnerable physical routes in a network - (\$355,000)- IFTI Lead Single , Sponsor CIA

State Proposal Highlights

- Journey to School in a Freight-Centric Community
\$40,000
- A performance-based guidebook for freight transportation planning: Addressing the goals of MAP 21, \$150,000
- Occurrence of Primary and Secondary Crashes: Identification, Visualization and Prediction, \$150,000
- Freight Corridor - State of the Art, \$40,000
- Truck Parking, \$80,000

Workforce Development

1. Annie Wise, MSc Student
 2. Kelsey Ford, MSc Student
 3. Jared O'Dell, MSc Student
 4. Zach Johnson, MSc Student
 5. Andrew Lutz, MSc Student
 6. Anteneh Yohannes, MSc Student
 7. Max Dulebenets, PhD Student
 8. Alireza Naimi, PhD Student
 9. Kwabena Anafi, PhD Student
- 5-6 New Students Joining this Fall



Publications (Rate of 10 per year)

- Transportation Research Part A, C & E
- International Journal of Advanced Manufacturing and Technology
- International Journal of Information Systems and Supply Chain Management
- Transportation Research Record
- International Journal of Information Technology Project Management
- Journal of Maritime Economics and Logistics
- Contributions to Books
- TRB, IIE, METRANS, TRF, WCTR among others

National Committees

- Ports and Channels
- Marine Environment
- Intermodal Freight Transportation
- Transportation Economics
- Freight Transportation Economics and Regulation
- ITE, FHWA



Workforce Development Research

- GEE / TREC & FTLA Continue to show great success
- GEE/TREC expands to Wooddale HS
- Workforce Summit as part of our Student Symposium



Vanderbilt University

Dr. Jimmy Dobbins

Associate Director VECTOR

Consortium Update

Dr. Martin Lipinski
Director Emeritus

CFIRE

UNIVERSITY OF WISCONSIN - MADISON

University of Wisconsin - Superior

University of Wisconsin - Milwaukee

University of Toledo

University of Illinois - Chicago

Michigan Technological University

UNIVERSITY OF MEMPHIS

Vanderbilt University

University of Alabama - Huntsville

University of Southern Mississippi





National Center

- National Center for Freight & Infrastructure, Research & Education
- Consortium Members:
 - Southern Hub Vanderbilt, Southern Mississippi and Alabama – Huntsville
- Total from US DOT - \$3,000,000
- Southern Hub Portion - \$1,100,000
- U of M portion - \$480,000

Tier 1 Center

- Center for Intermodal Freight Transportation Studies (CIFTS)
- Consortium Members: Vanderbilt, Southern Mississippi, Alabama – Huntsville, Washington and Old Dominion
- Total from US DOT - \$1,500,000
- U of M portion - \$682,226

Regional Center

STRIDE – Southeastern Transportation
Research Innovation, Development and
Education Center

Consortium Members: Florida, Auburn, NC-
Chapel Hill, Georgia Tech, Mississippi State,
NC State, UAB and FIU

Total from US DOT – \$2,750,000

U of M portion - \$100,000

Education & Outreach Review



THE UNIVERSITY OF
MEMPHIS®

The Freight Transportation
Leadership Academy

Garrett A. Morgan Grant

- Partnership with Memphis City Schools
- Focus on Wooddale High School
- IFTI has facilitated technical tours and professional speakers
- Co-Hosted Barrington Irving as a motivational speaker

2013 Intermodal Conference

- Date: September 24, 2013
- Location: FedEx Institute of Technology
- Speakers:
 - Commissioner Schroer
 - Congressman Cohen
 - TN Senator Norris

US Secretaries' Visits

Secretary Donovan
HUD



Secretary LaHood
Transportation



Legislative Aides Workshop

- Attended "The Aerotropolis University"
- Experienced mini-FTLA
- Toured IDEXX Laboratories, the CN Hump Yard, FedEx Night sort and the BSNF Intermodal Yard
- Uniquely able to host this type of event as a University

Freight Week

- Combined Student Freight Symposium & Workforce Development Summit
- 30 students from 14 Universities on campus talking about freight transportation research
- Industry professionals discussed growing workforce challenges facing our industry.
- Toured FedEx Night Sort, CN Hump Yard & BNSF

High School Summer Outreach

GEE



TREC



Women & Transportation

- Dr. Stephanie Ivey invited to White House
- Women & Transportation Society



Financial Report

Sean Ellis

Associate Director

CIFTS – UTC Program

- Total Award from US DOT = \$2,220,000
- Match is 1 to 1
- Grant extended to June 30, 2013
- Match provided by:
 - CN
 - TDOT
 - Project based

CAIT – Earmark

- Total award from US DOT \$4,600,000
- Match is 80 federal to 20 non-federal
- Grant ended June 30, 2012
- Match provided by:
 - CN
 - Ingram Barge
 - DeHart Gift
 - University Match
 - Project based

NEW CAIT – Extension

- Amount extended \$623,927
- Match is 80 federal to 20 non-federal
- Grant ended Oct 14, 2017
- There is a chance that there is additional funds available from this earmark. We are working with TDOT and the MPO to determine if additional funds are available.

CFIRE – New UTC

- Two years of funding award that began Jan 1, 2012
- Four years of spending, ending Jan 31, 2016
- Total Award of \$6,897,600 for the whole program
- U of M serves has Southern Hub with \$2,650,000 designated for the Southern Partners
- All funds must be matched 1 to 1 by receiving institution
- Match provided by:
 - TDOT - \$300,000
 - CN
 - Academy
 - Expanded supporting network

Other Funding Sources

- Garret Morgan Grant - \$32,000
- Freight Advance Traveler Information System (FRATIS) - \$25,000
- Herff College of Engineering (Kimberly Grantham) - \$12,000
- West TN Stem (Kimberly Grantham) - \$15,000
- Freight Transportation Leadership Academy (after expenses) - \$25,000

Student Report

Sean Ellis, Associate Director

Associate Researcher



Ioannis Psarros

Doctoral Candidates



Kwabena Anafi



Max Dulebenets



Hisham Gnedy



Ali Naimi



Keith Story

Graduate Students



Kelsey Ford



Annie Wise



Stephen Edwards



Zach Johnson



Jared O'Dell

Not pictured: Andrew Lutz, Anteneh Yohannes, Mohammad Farshchin

Executive Board Business

Dan Pallme
Interim Director

Bylaws

- Executive Board Membership (pg. 1-2)
- Executive Board Roles (pg. 3)

Upcoming Events

Dr. Martin Lipinski
Director Emeritus

Summer 2013

- Council of University Transportation Centers (June 10 – 13)
- GEE/TREC Summer Workshops (July)
- Freight Transportation Leadership Academy Cohort 13-B (August)
- US Department of Commerce visit (August)

Fall 2013

- Intermodal Freight Conference (Sept. 24)
- Fight for the Freight Cup (Oct. 3)
- Executive In Residence (November)



Open Discussion

Dr. Martin Lipinski
Director Emeritus