First Paper: Case Study
A descriptive case study of a particular transportation or logistics firm or industry, or of a public policy debate.

Aviation
- O’Hare expansion plan
- Airline response to fuel price increases
- Capacity expansion at San Diego airport
- Foreign investment restriction in U.S. aviation
- US Airways / America West merger Airport privatization
- Low-cost air carriers in Asia
- Effect of videoconference on business air travel
- Anti-trust immunity and airline fares
- Evolution of air cargo hubs
- Economic development effects of high-speed passenger rail
- Growth of Emirates, Eithad and Qatar airlines
- Queuing models of airport security screening
- Aviation cabotage
- Transatlantic low-cost airlines
- Essential Air Service program
- Joint venture between American Airlines and Qantas
- Pilot shortage in commercial aviation
- Point-to-point versus hub and spoke service
- Pandemic-era start-up airlines
- American Airlines / US Airways Merger
- Urban air mobility

Environment
- Transportation and the environment
**Highways**
- Highway privatization
- Effect of highway congestion pricing on retail stores
- Exclusive highway lanes for BRT and taxis
- New York East River crossing tolls
- Intersection design for bicycles
- Urban highway safety: Vision Zero

**Logistics / Supply Chain**
- Facility location for emergency services
- Dynamic routing for commercial trucks
- Fourth party logistics
- Reverse logistics in retailing
- Mapping for disaster preparedness
- IKEA’s supply chain
- Blockchain in logistics industry
- Logistics of blood supply

**Maritime**
- Developments in ocean shipping companies
- Container shipping possibilities on the Great Lakes
- Empty container repositioning models amid COVID-19 disruption

**Parking**
- Design of parking lots
- “Cashing out” of parking by employers
- Cruising for parking

**Rail: Freight**
- Capacity problems for Union Pacific Railroad
- Railroad track maintenance
- Railroad regulation in the United States
- Defining captive shippers of railroads

**Rail: Passenger**
- Passenger rail in the United States
- Electronic ticketing for commuter rail
- Effect of California high-speed passenger rail on land use
- Economic impact of Japanese high-speed trains
- The Hyperloop
- German High Speed Rail

**Taxis / Ride-hailing**
- Long-distance ride sharing
Travel Demand
• Activity-based travel demand models
• Staggered work time schedules and congestion

Trucking
• Regulation of motor carriers
• Autonomous trucks

Urban Mass Transit
• The Chicago area transit financial crisis of 2007
• Transit in Colorado Springs
• Rail transit in Los Angeles
• Barriers to domestic Bus Rapid Transit development
• Express rail service to O'Hare
• ADA Paratransit finances
• Transit expansion in suburban Atlanta
• Honolulu light rail project
• Light rail in Minneapolis-St Paul
• COVID-19 and transit
• Suburban transit hub design principles

Urban Planning
• The Chicago Metropolis 2020 plan
• Urban growth boundaries
• Effect of urban growth boundary in Portland, Oregon
• Equity in transportation planning

Second Paper: Research Paper
An extended, analytical, paper that evaluates a specific public policy initiative or a business issue.

Aviation
• Effect of competition on air fares
• Essential Air Services program evaluation
• Effect of flight restrictions on Dallas Love Field on fares at Dallas-Fort Worth airport
• Effects when an airport ceases to be a hub (two separate student papers)
• Cabotage in aviation
• Effect of travel across time zones on performance of professional baseball players
• Effect of fuel prices on airline financial performance
• Air cargo to Hawaii
• Effect of airline capacity reductions in 2008
• Worldwide airline stock prices
• Stability of duopoly in airline markets
• Competition and fares on air routes from Las Vegas
• Effect of airline baggage fees
• Growth of transcontinental air service
• Airline market power and flight delays
• Airport security screening
• Effect of “bad news” on airline stock prices
• Optimal locations for hub airports in the United States
• Airfare premium for non-stop flights
• Introduction of “basic economy” air fares
• Pilot shortage in commercial aviation
• Strategies of Ultra-Low-Cost Carriers in the US
• Effect of entry of Allegiant Air on airport demand
• Market share changes after American Airlines / US Airways merger
• The S curve for air market share
• Modeling severe weather in hub-and-spoke and point-to-point air markets

**Environment**
• Carbon emissions in supply chains

**Highways**
• Design of Lincoln Street / Sheridan Road intersection
• Cost-benefit analysis of exclusive highway lanes for BRT and taxis
• Effect of texting bans on highway fatalities
• Conditions for implementing “road diets”
• Chicago’s “Loop Link” bus lanes
• Analysis of traffic crash severity in Chicago

**Logistics / Supply Chain**
• Oil and gas exports from Russia to Europe
• The effect of ethanol as a fuel on food production
• Effect of self-distribution laws on development of craft breweries

**Maritime**
• Competition between container shipping companies
• Modeling container traffic at Ports of Los Angeles and Long Beach

**Parking**
• Parking policies on Northwestern’s Evanston campus

**Rail: Freight**
• Financial feasibility of Positive Train Control
• Pedestrian deaths on the railroad
• Market power in coal transportation from the Powder River Basin
• Development in railways in the Soviet Union 1917-1932
**Rail: Passenger**
- High speed passenger rail feasibility in the United States
- Effect of population growth on commuter rail ridership
- Financial performance of high-speed passenger rail
- Ranking U.S. corridors for high-speed passenger rail development
- Effect of new high-speed rail service on land use in Takaoka, Japan

**Taxis / Ride-hailing**
- Changes in taxi demand by neighborhood in Chicago after the entry of Uber/Lyft etc.
- Modeling demand for long-distance car sharing in France
- Outsourcing of Northwestern University’s Saferide system to Via
- Taxi demand following a tax on ride-hailing trips in downtown Chicago
- Redesigning NU shuttles to serve some SafeRide users

**Travel Demand**
- Effect of e-shopping on shopping trips
- How the valuation of time may vary by mode

**Trucking**
- Effect of truck driver safety violation notification system

**Urban Mass Transit**
- Population density and transit performance
- ADA paratransit provision
- Transit investments association with the Olympic Games
- Comparison of transit provision in five cities
- Effect of network expansion on ridership of Los Angeles rail transit
- Comparison of BRT versus LRT ridership in Los Angeles
- Fare elasticities for subway and commuter rail services
- Origin-Destination matrix for the Chicago Transit Authority rail system
- Ridership changes at stations on Dubai’s mass transit rail system
- Ridership changes at stations on the Chicago Transit Authority rail system
- Light rail expansion in Minneapolis-St Paul
- Delay propagation on CTA Purple Line express
- Transportation equity in Chicago neighborhoods
- Transit in Jackson, Wyoming