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Economics 190/290 Lecture 1



**Transportation Economics:  
An Introduction**

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Instructors/TA

- **Please note contact information and office hours**
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    - Off. Hours: Mon & Th, 2:00-3:30
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    - <http://www.econ.ucdavis.edu/faculty/fzfeens>
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## Prerequisites and Purpose

- **Prerequisites**

- See syllabus
- The Math Issue

- **Purpose**

- Serve the TTP Program’s needs for a course on the economics of the Transportation Sector
- Enable advanced undergraduates to see theory applied to an important sector

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## Required Texts/Readings

- **“Porter”**

- **“Essays”**

- **“Readings”**

- The “departmental reserve” system of the Department of Economics

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## Grading

- **Midterm: 30%**
- **Final: 45%**
- **Class Participation is Expected and Required (5%)**
- **Homeworks: 20%**
  - No late homeworks will be accepted
  - Students may work in groups
  - Distributed via the website, collected in class

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## Extra Goodies

- **Multimedia presentations of lectures, PowerPoint slides downloadable (in advance) from class website**
- **Using of computer lab, SSH 233**
- **In-class presentations by outside experts (end of course)**
- **Class website**  
(<http://www.econ.ucdavis.edu/faculty/fzfeens>)

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## Major Topics Covered/Timeline

- **The Automobile in Society (Jan. 10-22)**
  - The “market” for driving
  - Social costs of driving – pollution
  - Social costs of driving – fuel economy and auto safety
  - Social costs of driving – “suburbanization” and other horrors of modern life

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## Major Topics Covered/Timeline

- **The Automobile Industry (Feb. 24-29)**
  - The rise of the car
  - The U.S. automobile oligopoly, 1900-1975
  - The Japanese invasion and other positive developments
  - The global auto industry in 2000

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## Major Topics Covered/Timeline

- **Deregulation and Intercity Transportation (March 2-March 7)**
  - Railroads
  - Trucking
  - Airlines
  - Deregulation outside the United States

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## Major Topics Covered/Timeline

- **Techniques of Transportation Analysis (Jan. 6-Feb. 3)**
  - Demand
  - Costs
  - Pricing
  - Project Evaluation/Congestion Analysis

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## The Transportation Industry in Context

- **Transportation and the Global Economy: The 19<sup>th</sup> Century**

- Steamships
- Railroads
- The Evidence: Goods price integration across and within continents
- A global economy by the late 19<sup>th</sup> century

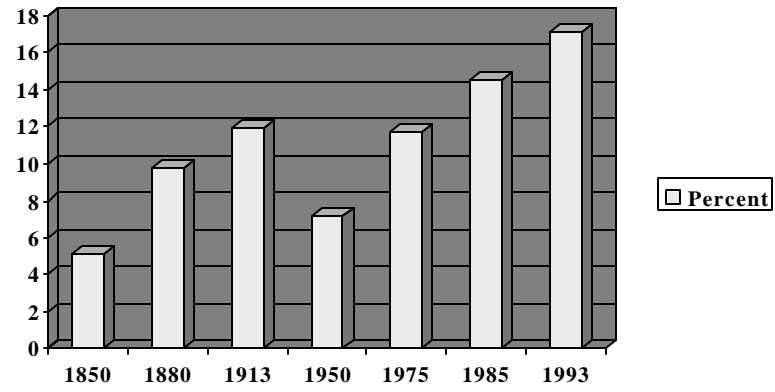
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## The Transportation Industry in Context

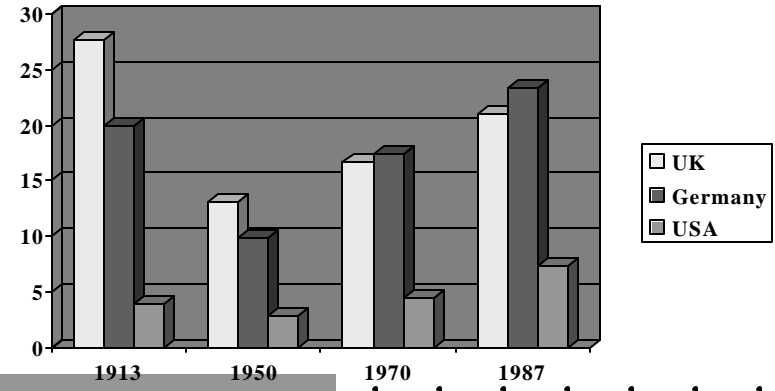
Railway Mileage, 1850-1910

Country	1850	1870	1890	1910
USA	9,021	52,922	116,703	249,902
Canada	66	2,617	13,368	26,462
UK	6,621	15,537	20,073	23,387
Germany	3,637	11,729	25,411	36,152
Japan	--	--	1,139	5,130

World Merchandise Exports, % of GDP



Trade Shares of Major Countries



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## The Transportation Industry in Context

- **Transportation and the Global Economy: The 20<sup>th</sup> Century**
  - The internal combustion engine
  - Aircraft
  - The expansion of global trade since the 1970s
  - Transportation as an input to the production of almost everything
  - “Just-in-time” delivery systems and modern manufacturing
  - Realizing the potential of E-commerce

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## The Transportation Industry in Context

- **Economic Problems of the Transportation Sector**
  - The problem of public goods!
  - The problem of externalities!
  - Pervasive intervention
  - The need for well-schooled policy experts

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## The Transportation Industry in Context

- **Transportation and Transportation Policy in the U.S. Economy: Railroads**

- The post-civil war railroad boom – and its principal sponsor: Uncle Sam
- Competition and its critics
- The rise of the Interstate Commerce Commission – and the twilight of competition in the U.S. railroad sector
- Bankruptcy and deregulation in the late 20<sup>th</sup> Century

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## The Transportation Industry in Context

- **Transportation and Transportation Policy in the U.S. Economy: Autos**

- The rise of the automobile, the bus, and the truck, 1890-1930
- The extension of regulation to trucking
- The public takeover of urban bus transportation
- The highway bonanza
- The oil crisis, the Japanese, and the last 10 years

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## The Transportation Industry in Context

- **Transportation and Transportation Policy in the U.S. Economy: Airlines**
  - Mail delivery
  - The Civil Aviation Board
  - Deregulation in the 1970s
  - The boom in air travel – and air freight!

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## To do by Tuesday

- **Download lectures 1 and 2 from the course web site**
- **Start the reading from Porter**