



高等院校工业工程专业系列规划教材

Professional English for Logistics Engineering and Management

物流工程与管理 专业英语

◎ 王爱虎 编



北京理工大学出版社
BEIJING INSTITUTE OF TECHNOLOGY PRESS

013054947

H31-43
555

高等院校工业工程专业系列规划教材

物流工程与管理专业英语

Professional English for Logistics Engineering and Management

王爱虎 编



 北京理工大学出版社

BEIJING INSTITUTE OF TECHNOLOGY PRESS



北航

C1663384

H31-43
555

750320810

内 容 简 介

本书是一本为物流工程与管理、物流与供应链管理等专业的学生（包括本科生、硕士生和博士生）、老师和从业人员，系统介绍交通运输、物流管理和供应链管理领域发展历史、现状和趋势以及专业词汇的学习材料。通过对该教材的学习不仅可以掌握大量的专业词汇，而且可以提高专业英语阅读能力和专业沟通能力。

本书特点如下：

- 大部分内容编选自高水平国际刊物，有较强的前瞻性，对高年级本科生、硕士生乃至博士生的论文写作有一定的指导意义。
- 突出了对物流领域专业知识的介绍，与普通英语教学有较好的互补和衔接。
- 参考物流术语的国家标准对物流专业词汇进行了大范围收集和汇编，可以作为物流从业人员做对外合作与交流工作的工具书。
- 介绍了主要欧美物流认证机构及其认证过程。
- 每篇文章后均配备了数目不等、旨在启发思考且联系我国物流管理实践的思考题。
- 给出了大量的网址，为对该领域感兴趣的读者提供了一个网上冲浪的起点。
- 为增强趣味性，在教材的最后给出了一些简短的文章，讲述了该领域的相关事件。

版权专有 侵权必究

图书在版编目 (CIP) 数据

物流工程与管理专业英语 / 王爱虎编. —北京：北京理工大学出版社，2013. 7
ISBN 978 - 7 - 5640 - 7928 - 4

I. ①物… II. ①王… III. ①物流 - 物资管理 - 英语 - 高等学校 - 教材 IV. ①H31

中国版本图书馆 CIP 数据核字 (2013) 第 159498 号

出版发行 / 北京理工大学出版社有限责任公司

社 址 / 北京市海淀区中关村南大街 5 号

邮 编 / 100081

电 话 / (010) 68914775 (总编室)
82562903 (教材售后服务热线)
68948351 (其他图书服务热线)

网 址 / <http://www.bitpress.com.cn>

经 销 / 全国各地新华书店

印 刷 / 保定市中华美凯印刷有限公司

开 本 / 787 毫米 × 1092 毫米 1/16

印 张 / 19.25

字 数 / 446 千字

版 次 / 2013 年 7 月第 1 版 2013 年 7 月第 1 次印刷

定 价 / 39.00 元

责任编辑 / 梁铜华

文案编辑 / 梁铜华

责任校对 / 周瑞红

责任印制 / 王美丽

图书出现印装质量问题，请拨打售后服务热线，本社负责调换

前 言

时光飞逝！从《物流与供应链管理专业英语》于2006年1月推出第一版，到2013年5月再版，推出《物流工程与管理专业英语》，近8年时间转瞬即逝！

期间，经历了2008年学校院系调整给编者及其学术团队带来的机遇和挑战。华南理工大学工商管理学院该领域的全日制硕士生和博士生招生方向由此调整为“物流与供应链管理”。

期间，承接了国家自然科学基金、博士点基金、政府和企业委托项目20余项，亲身体会到物流领域实践和理论研究的活跃。物流技术开发与香港物流发展战略研究、港口物流技术开发与虎门港发展策略研究、中国外运广东有限公司黄埔仓码物流系统仿真建模与分析、中国移动广东公司物流发展规划研究、东莞市现代物流业发展规划（2009—2020）、广东科技与金融创新发展模式研究——以现代物流业为例、共享腹地港口群国际物流系统网络复杂性及优化方法研究、东莞市口岸中长期发展规划（2012—2020）等项目的顺利完成，充分说明物流科技、物流规划、港口物流、物流仿真、物流金融、国际物流、复杂网络等理论和方法在我国物流领域有广阔应用前景。

期间，见证了国内物流领域本科和研究生教育的滞后及其与实践的脱节。一方面是业界对熟知现代物流理论和方法高水平人才的迫切需求；另一方面是在读硕士生乃至博士生对物流领域发展历程、基本理论和管理实践的陌生。

期间，感受到物流领域从业人员在专业英语方面能力的不足。

身为物流与供应链管理领域的一名教育工作者，编者深刻地感受到了我国该领域教学体系、培养方案、教材等方面建设的滞后。因此，结合自己的学术专长，对《物流工程与管理专业英语》进行了编写，目的是为物流工程和管理、物流与供应链管理等专业的学生（包括本科生、硕士生乃至博士生）、老师和从业人员，提供一本系统介绍该领域的发展历史、现状和趋势以及专业词汇的学习材料，以使其能够通过专业词汇的集中学习提高专业英语阅读能力和专业沟通能力。

本书有如下特点：

- 大部分内容编选自高水平国际刊物，有较强的前瞻性，对高年级本科生、硕士生乃至博士生的论文写作有一定的指导意义。
- 突出了对物流领域专业知识的介绍，与普通英语教学有较好的互补和衔接。
- 参考物流术语的国家标准对物流专业词汇进行了大范围收集和汇编，可以作为物流从业人员做对外合作与交流工作的工具书。
- 介绍了主要欧美物流认证机构及其认证过程。
- 每篇文章后均配备了数目不等、旨在启发思考且联系我国物流管理实践的思考题。
- 给出了大量的网址，为对该领域感兴趣的读者提供了一个网上冲浪的起点。

ii 物流工程与管理专业英语

● 为增强趣味性,在教材的最后给出了一些简短的文章,讲述了该领域的相关事件。

与《物流与供应链管理专业英语》相比,《物流工程与管理专业英语》主要在如下几个方面进行了补充和完善:

● 调整了全书的篇章结构:从以前的16章扩充至目前的21章,结构有所调整,内容有所充实。

● 增加了“物流与供应链管理的演变和未来”,将物流领域著名学者 Ronald H. Ballou 教授 45 年的经验总结展现给读者。

● 增加了“集中式物流的效果毁誉参半”,激发读者对集中式物流和分散式物流管理效果的深度思考。

● 增加了“面向绿色地球的绿色运输”,运用数据分析和图形展示等方法,弥补了部分绿色运输和绿色物流等文献在统计数据资料方面的不足,给读者以直观冲击并有助于提升其环境保护意识。

《物流工程与管理专业英语》的推出,首先感谢教材主要参考文献的作者,这些物流领域同行扎实的研究和系统的归纳,使我们领略到物流工程与管理、物流与供应链管理理论和方法精髓的同时,也感受到相关领域的研究应该具有的严谨和务实态度。其次,感谢美国纽约州立大学布法罗大学工业与系统工程系 Dr. Rakesh Nagi 和 Dr. Li Lin, 南京大学盛昭瀚教授、程书萍教授,同济大学霍家震教授,南开大学刘秉廉教授,天津大学赵道致教授,中山大学陈功玉教授,西南交通大学张锦教授,华中科技大学马士华教授、徐贤浩教授,以及大连海事大学靳志宏教授等的支持。此外,感谢北京理工大学出版社对编者的垂爱和对教材编写所提供的支持和帮助。最后,感谢我的妻子王向莉女士在本书的编写过程中所表现出的理解、宽容和支持。

由于编者水平有限,书中难免有不妥和谬误之处,恳请读者批评和指正。

王爱虎

华南理工大学工商管理学院

bmawang@scut.edu.cn

2013年5月27日

篇目简介

1. Evolution of Academic Concerns with Transportation and Logistics

运输与物流的学术思维的演变

关于运输与物流的学术研究可以追溯到 18 世纪 50 年代的经济学家亨利·亚当斯，时任耶鲁大学校长的他讲授了一门关于运输经济学的课程。在 18 世纪，运输问题是经济学家研究的热点问题之一，且研究内容大多集中在运输成本和运输费率等问题上。而关于运输和物流的现代化思维则来自于第二次世界大战，其理念一方面衍生于交通运输管理和运输经济学，另一方面衍生于营销学。

2. Perspectives on the Evolution of Logistics Thought

关于物流思维演变的一些观点

本文试图回答“哪些主观看法有助于物流思维的变化”这个问题。为此，走访了一些著名的物流研究人员并对其观点进行了归纳和整理，其结果体现为文中关于物流发展的 6 个时代。

3. The Evolution and Future of Logistics and Supply Chain Management

物流与供应链管理的演变和未来

与前两篇分别运用文献研究和专家访谈方法对物流领域的学术和思维演变过程的探讨不同，本文是物流领域著名学者 Ronald H. Ballou 教授撰写的一篇综述性论文。作者结合自己 45 年的经验，对美国物流与供应链管理领域概念、理念、关注点、发展历程和面临的挑战等进行了提炼和总结，对未来的发展进行了展望。

4. Transport Reviews—The 30th Anniversary of the Journal

《运输评论》——创刊 30 周年

尽管交通运输与物流工程与管理以及供应链管理的关系密不可分，但由于交通运输涉及航空运输、铁路运输、公路运输、内河水运、近洋运输和远洋运输乃至管道运输等多种运输模式，用有限的篇幅对交通运输工程和管理进行高度概括难度可想而知。2010 年《运输评论》杂志创刊 30 周年，University of Oxford 和 University of Westminster 的 Banister, Browne 和 Givoni 教授撰写了这篇论文，高度概括和总结了该杂志在 30 年的发展历程中所取得的成就，同时也勾勒出交通运输领域在同期研究焦点、研究范围和研究方法的发展轨迹和发展趋势，是一篇不可多得的文章。

5. Supply Chain Network Design

供应链网络设计

供应链网络是供应链运作的基础，因而网络设计是影响一个公司竞争力和投资决策的重要因素。随着供应链管理所倡导的跨边界合作的不断扩展，所要解决的问题是判断“现有的网络设计和分析方法是否仍然适用”。答案基本上是肯定的，因为网络设计所要考虑的供应链阶数通常局限在很小的数目。然而，关于支持网络设计的网络分析和

网络建模方面仍然存在一些有待解决的问题。本文讨论了如何建立更好的模型, 如何处理这些模型所需要的数据, 以及如何对不同的模型进行比较等网络设计问题。

6. Relationships Among TPL Providers and Members of Supply Chains

第三方物流提供商与其他供应链成员间的关系

随着最近几年物流服务外包的迅猛发展, 第三方物流和供应链管理也受到了学术界更多的关注。然而, 从战略角度对第三方物流提供商与其他供应链成员间关系的研究则不多见。所以, 本文提出了一个战略框架并对不同的供应链管理战略与相应的第三方物流服务选择间的关系进行了深入研究。

7. Security-aware Logistics

有安全意识的物流

为减少恐怖分子的威胁而实施的新的安全措施的一个结果是美国每年将支付 1 510 亿美元的额外成本和 650 亿美元用于供应链中物流环节调整的费用。所以, 物流领域的一个新兴问题是如何在最小化上述成本的基础上获得有效的、安全的物流和供应链运作环境。为此, 在回顾了恐怖袭击造成的供应链瓦解、应急计划、安全措施可能引发的成本以及目前正在考虑的物流安全法规基础上, 本文提出了在新的供应链环境下进行物流操作的 5 项原则。

8. Reverse Logistics

逆向物流

物流领域的一个新概念是逆向物流。逆向物流被越来越多的公司作为盈利和获得可持续发展的企业战略。本文对逆向物流进行了全方位的描述并从现有文献和企业的成功案例中提炼出实施逆向物流的 11 条建议。

9. Green Logistics

环保物流

环保问题对众多的物流决策有深远影响, 所以, 本文首先识别企业用来管理和响应环保问题的最常用和最少用的战略, 然后建立公司的特点与所选择的特定环保物流战略之间的关系。

10. Green Transportation for a Green Earth

面向绿色地球的绿色运输

运用数据分析和图形展示等方法, 对海洋运输、公路运输、航空运输、管道运输、铁路运输等主要运输模式对环境的影响进行了量化分析, 弥补了部分绿色运输和绿色物流等文献在统计数据资料方面的不足, 给读者以直观冲击并有助于提升其环境保护意识。

11. Global Logistics

全球物流

物流已经从过去管理费用的避难所逐步发展为企业节约成本甚至盈利的利刃。因而, 制造型的企业均在有意识地向现代物流转变。同时, 最近其他运输领域法规的解禁也对物流实践产生了深远影响。本文回答了如何选择全球物流服务提供商, 以最大限度地发挥《海运改革法案 1999》所带来的利益, 以及如何充分利用先进技术

等问题。

12. The Relationship Between Logistics to Supply Chain Management

物流与供应链管理的关系

最近, 学者和业内人士对物流和供应链管理的概念产生了一些混淆和分歧。关于两个概念各有许多定义且每个概念在不同行业的含义也不同。本文对两个概念的历史发展进行了研究, 并提出了一个用来阐述二者关系的层次观点。

13. Supply Chain Management

供应链管理

自 19 世纪 80 年代人们对供应链管理的兴趣就与日俱增, 因为企业已经认识到企业内部乃至跨企业的合作可以为其带来收益。本文对供应链管理予以定义, 并对其演变过程予以讨论。

14. Information Systems Development Within Supply Chain Management

供应链管理信息系统的发展

为了提高供应链管理的有效性, 以期在当前的动态全球市场中赢得竞争优势, 仅仅在企业内部对业务流程进行有效整合是远远不够的, 需要对供应链上所有合作伙伴的操作予以同步化。在过去, 通常是由一个企业对其所拥有或所控制的所有业务进行同步化, 然而, 现在的同步化则更多地借助跨企业的信息系统来实现。为此, 本文对供应链环境下跨企业信息系统的的发展及其作用进行了分析。

15. Simulation in Supply Chain

供应链仿真

经济全球化的深入、市场竞争的加剧以及顾客需求的疲软使得企业不得不借助供应链管理来进一步优化企业的流程, 尤其是与物流伙伴间的合作与结盟。尽管关于流程整合的 IT 产品有很多, 但物流网络以及局部利益最大化所引起的问题使得现有产品不能对复杂的物流网络进行有效整合。在供应链这个多决策主体环境下, 仿真无疑是能够发挥重要整合作用的信息技术之一。本文对供应链环境下的仿真文献进行了综述, 以期回答人们通常用仿真来达到什么样的目的, 以及什么样的仿真工具和平台更适用等问题, 为供应链领域的学者和从业人员进行物流网络整合提供参考。

16. Supply Chain Costing: An Activity-based Perspective

基于作业成本法的供应链成本核算方法

本文旨在介绍物流成本以及成本核算方法, 以期达到优化物流总成本的目的。首先对物流管理的历史和演变过程进行了回顾并介绍了作业成本法, 然后分析了影响成本的关键物流活动, 并介绍了如何应用作业成本法对物流成本予以分摊, 最后对基于作业成本法的供应链成本核算方法的实施提出了管理上的建议。

17. Supply Management and E-procurement

供应管理与电子采购

人们对供应链管理的重视使得对供应链中供应管理的关注与日俱增, 而且随着企业对电子采购策略应用的日益增多, 这种关注将会越来越强烈。本文首先介绍了采购流程并对电子采购对采购流程的影响、潜在的问题及可能的收益进行了论述, 其次

iv 物流工程与管理专业英语

应用经济增加值方法对电子采购的效果进行了评估,最后对经济增加值方法的局限性以及管理建议进行了归纳。

18. RFID Technologies

无线射频识别技术

无线射频识别技术能够填补供应链中尤其是零售和物流网络中的信息断层,从而实现供应链中信息的实时化和透明化。本文对无线射频识别技术进行了介绍,提供了几个案例并提出了该技术应用过程中的管理建议。

19. Centralizing Logistics Leads to Mixed Results

集中式物流的效果毁誉参半

在一体化物流成为管理理论研究和实践探索所追求的终极目标的大背景下,本文的实证研究结果颇有些戏剧性。通过对集中式物流和分散式物流的对比分析,发现集中式物流的效果毁誉参半,进而对可能的原因进行了分析。

20. Logistics Certifications

物流认证

分别对英国皇家物流与运输学会、美国物流与运输学会、加拿大专业物流学会和美国物流管理学会物流认证项目的目的、课程设置、认证过程和方法等进行了简要介绍。

21. Reading for Fun

趣味阅读

编者将物流工程与管理以及物流与供应链管理领域的短文进行了汇集,既可以将其穿插在前面各章的正文中加以讲解,也可以供读者在课余时间阅读欣赏,以进一步拓展其视野。

目 录

1. Evolution of Academic Concerns with Transportation and Logistics	1
1.1 The age of the economist	1
1.2 Broader concerns	6
1.3 The logistics evolution	8
1.4 Conclusions.....	10
2. Perspectives on the Evolution of Logistics Thought	14
2.1 Literature review	14
2.2 Research findings: six eras	18
2.3 How academic programs affect logistics thought	24
2.4 Conclusions.....	25
3. The Evolution and Future of Logistics and Supply Chain Management	27
3.1 The past.....	27
3.2 The present.....	32
3.3 The future	36
3.4 Reflection.....	37
4. Transport Reviews—The 30th Anniversary of the Journal	39
4.1 The early years: the 1980s.....	39
4.2 Consolidation: the 1990s.....	40
4.3 Maturity: the 2000s.....	41
4.4 Comments and reflections	43
4.5 Looking ahead.....	44
5. Supply Chain Network Design	48
5.1 Introduction.....	48
5.2 The network design problem	49
5.3 The supply chain and facility location	50
5.4 Developmental issues in facility location	51
5.5 Method comparison.....	58
5.6 Conclusions.....	58

ii 物流工程与管理专业英语

6. Relationships Among TPL Providers and Members of Supply Chains	61
6.1 Introduction	61
6.2 Supply chain management strategies	62
6.3 Third-party logistics	63
6.4 General service	64
6.5 Service strategies for third-party logistics providers	66
6.6 Matching supply chain and third-party logistics strategies	69
6.7 Managerial implications	71
7. Security-aware Logistics	74
7.1 Introduction	74
7.2 Five Tenets of security-aware logistics and supply chain operation	75
7.3 Recent and potential regulations	82
7.4 A new type of smart container	85
7.5 Summary	86
8. Reverse Logistics	90
8.1 Introduction	90
8.2 Review of literature	91
8.3 The components of reverse-logistics systems	92
8.4 Conclusions	96
9. Green Logistics	98
9.1 Introduction	98
9.2 Research purpose	99
9.3 Research results	100
9.4 Conclusions and implications	104
10. Green Transportation for a Green Earth	108
10.1 Shipping	108
10.2 Trucking	111
10.3 Air transport	112
10.4 Pipeline	113
10.5 Railway/train system	113
10.6 Summary	115

11. Global Logistics	118
12. The Relationship Between Logistics and Supply Chain Management	126
12.1 History and definitions of logistics.....	126
12.2 History and definitions of supply chain.....	128
12.3 Logistics and supply chain definitions in practice.....	130
12.4 Discussion.....	132
12.5 Conclusions.....	133
13. Supply Chain Management	135
13.1 Introduction to supply chain concepts.....	135
13.2 Definition of supply chain.....	135
13.3 Interest in supply chains.....	136
13.4 History of the supply chain initiative.....	138
13.5 Collaborative supply chain initiatives.....	141
13.6 What the supply chain is not.....	141
13.7 Linking the supply chain to the business strategy.....	142
14. Information Systems Development Within Supply Chain Management	147
14.1 Introduction.....	147
14.2 Inteorganizational information systems.....	148
14.3 Internet IOS applications.....	151
14.4 Information sharing and communication improvements.....	153
14.5 Supplier relations.....	154
14.6 Customer service improvements.....	154
14.7 Conclusions.....	155
15. Simulation in the Supply Chain Context	158
15.1 Introduction.....	158
15.2 The role of simulation techniques in the supply chain context.....	159
15.3 Literature survey.....	163
15.4 Survey analysis.....	165
15.5 Conclusions.....	167
16. Supply Chain Costing: An Activity-based Perspective	171
16.1 Introduction.....	171
16.2 ABC.....	172
16.3 Integrating supply chain and ABC.....	173

iv 物流工程与管理专业英语

16.4	Implementation issues of ABC	174
16.5	Managerial implications	178
16.6	Implementation techniques	179
16.7	Conclusions	179
17. Supply Management and E-procurement		182
17.1	Introduction	182
17.2	The purchasing process	183
17.3	E-procurement	184
17.4	The role of e-procurement in the purchasing process	184
17.5	E-procurement: a caveat	187
17.6	The benefits of e-procurement	187
17.7	Making a business case for e-procurement	189
17.8	Economic value added (EVA)	189
17.9	Enter e-procurement	190
17.10	Limitations of EVA	192
17.11	Summary	192
18. RFID Technologies		195
18.1	Introduction to RFID technology	195
18.2	The MIT AUTO-ID Center and EPCglobal	197
18.3	Process freedom and supply chain visibility	202
18.4	Managerial guidelines for RFID development	202
18.5	Conclusions	209
19. Centralizing Logistics Leads to Mixed Results		212
19.1	Delivery quality	212
19.2	Inventory management	213
19.3	Logistics costs	214
19.4	Structure strategically	215
20. Logistics Certifications		217
20.1	The chartered institute of logistics and transport in the UK	217
20.2	AST&L's certification in transportation and logistics	219
20.3	Professional logistician (P. Log.) designation in Canada	225
20.4	Institute of logistics management's certified logistics practitioner in America	232

21. Reading for Fun	234
21.1 Fifty years of excellence.....	234
21.2 CLM changes to CSCMP.....	240
21.3 A logistics nightmare	240
21.4 Challenges in the air cargo supply chain	243
21.5 Benchmarking in logistics	247
21.6 Synchronizing the supply chain.....	249
21.7 World logistics competitiveness ranking (2012).....	251
21.8 RFID in the supply chain.....	252
 专业词汇汇总表	 257
参考文献.....	291

1. Evolution of Academic Concerns with Transportation and Logistics

1.1 The age of the economist

The academic study of transportation and logistics is not new; indeed, in America it goes back to the 1850s when Henry Adams, an economist who was president of Yale University, offered a course in the Economics of Transportation. As L. Leslie Waters, University Professor of Transportation and Business History at Indiana University, wrote in 1966:

In 1850, an important book was published in London (and New York): Dionysius Lardner: Railway Economy: A Treatise on the New Art of Transportation. It was a comprehensive treatment of transport both from an economic and a business point of view. During the following seventy-five years, many leading economists devoted their descriptive and analytical powers to transport economics. Taussig, Fetter, and Hadley were typical of those who were impressed with the significance of the area. About the time that transport began to get complex with the emergence of new modes of conveyance, however, the interest of economists waned. Other problems seemed more beguiling. Not until recent years has there been a renewal of interest in transportation on the part of business administrators, economists and government officials.

It is well to recall that the study of economics is a very old discipline. Some call it the “mother science” of business. Both Plato and Aristotle wrote about economics in the period of 380 B.C. to 350 B.C. These scholars were followed by centuries of writings about the economy. It is also well to remember that, as Alexander Gray notes:

...Political Economy throughout [the ages] has been in large measure an attempt to explain, within the existing framework and assumptions of society, how and on what theory contemporary society is operating.

Given the importance of transportation in the development and growth of any economy, it is not surprising that economists were interested in transportation. The much quoted Adam Smith wrote in 1776 that economic growth depended on “the division of labor” and man’s “propensity to truck, barter and exchange one thing for another.” But this division of labor is “limited by the extent of the market,” and Smith cites as an example transportation:

As by means of water-carriage a more extensive market is opened to every sort of industry than what land-carriage alone can afford it....a broadwheeled wagon, attended by two men, and drawn by eight horses, in about six weeks time carries and brings back between

2 物流工程与管理专业英语

the ports of London and Edinburgh near four ton weight of goods. In about the same time, a ship navigated by six to eight men and sailing between the ports of London and Leith frequently carries and brings back two hundred ton weight of goods.

What an excellent example of “Transportation Conquers Distance,” the motto of Delta Nu Alpha International Transportation Fraternity! Smith also made a strong case for “public works” as part of the proper role of the “Sovereign or Commonwealth” with a strong recommendation for tolls based on weight.

When the carriage which passes over the highway or a bridge, and lighters which sail upon a navigable canal, pay tolls in proportion to their weight or tonnage, they pay for the maintenance of the public works exactly in proportion to the wear and tear which they occasion of them. It seems scarcely possible to invent a more equitable way of maintaining such works. This tax or toll, though it is advanced by the carrier, is finally paid by the consumer, to whom it must always be charged in the price of the goods.

One could say with some degree of truth that Adam Smith was one of the first transportation economists!

It is not surprising, then, that American economists were very interested in transportation in the 18th century. At the very first meeting of the American Economic Association (AEA) in 1885, the group was organized and the by-laws of this oldest economic association in America established nine “standing committees” to study and report at annual meetings — transportation was, of course, one of the nine.

The association also established American Economic Association Publications, and Vol. II (1887) contained an essay entitled “The Railway Questions” by Edmond J. James (University of Chicago). Subsequent essays were also on “Road Legislation for the American State” (J.W. Jacks, Cornell, 1889); “Two Papers on the Canal Question” (E. James & L. Haupt, 1890); “State Railroad Commissions and How They May Be Made Effective” (F. Clark, Ohio State, 1891) and “Theory of Transportation” (C. Cooley, Michigan, 1894). Another indication of academic interest in transportation appears in the yearly list of titles of doctoral dissertations granted beginning in 1904. Assumedly, their authors, newly-earned Ph.D. degrees in hand, went on to teach transportation economics. (The Ph.D. degrees awarded by U.S. institutions were quite rare during this period. Many economists got their graduate degrees in England, France, or Germany in the 19th century and up to World War I.)

In 1911, the American Economic Association began publishing quarterly the *American Economic Review*. Vol. 1, No. 1, carried M.B. Hammond’s (Ohio State and later president of the AEA) “Freight Rates: Recent Efforts to Advance” as well as a list of “Articles and Abstracts in Other Economic Journals.” In that first list in Vol. 1 (1911-12), there were 109 articles on railroads, 40 articles on water transportation, and 23 articles on public utilities. Clearly, academic interest in transportation was very high as measured by writings in academic periodicals in 1911.

Another measure of academic interest in transportation can be found by the noting books published prior to 1931 (See Table 1-1). Textbook authors are particularly apt at bringing together material from academic periodicals, government cases, and reports. If one examines the content of these books, several things are noteworthy. First, almost all concern railroads, with little discussion of alternative modes of transportation except for inland and maritime water transportation. This is completely understandable because railroads were almost the only means of intercity inland transport until 1920. Second, the vast majority of the material is on regulation and its effects or shortcomings. Again, that is not a surprise since federal regulation began with the Act to Regulate Commerce in 1887 (which created the Interstate Commerce Commission) followed by the Compulsory Testimony Act of 1893, the Expediting Act of 1903, the Elkins Act of 1903, the Hepburn Act of 1906 (which included the regulation of oil pipelines), and the Mann-Elkins Act of 1910. Liability provisions were strengthened by the Carmack Act of 1906 and the First and Second Cummins Amendments of 1915. All of these legislative initiatives were aimed at strengthening regulation. Indeed, prior to World War I “transportation regulation of monopoly seemed to be almost complete.”

Table 1-1 Partial List of Early Books on Transportation—1850 to 1931

1850	Dionysius Lardner: <i>Railway Economy: A Treatise on the New Art of Transportation</i>
1869	Henry V. Poor: <i>Influence of the Railroads of the United States in the Creation of Its Commerce and Wealth</i>
1877	Arthur M. Wellington: <i>The Economic Theory of the Location of Railways</i>
1878	Charles Francis Adams, Jr.: <i>Railroads: Their Origins and Problems</i>
1885	Arthur T. Hadley: <i>Railroad Transportation: Its History and Its Laws</i>
1886	J. Grierson: <i>Railway Rates: English and Foreign</i>
1887	J.S. Jeans: <i>Railway Problems</i>
1888	J.L. Ringwalt: <i>Development of Transportation Systems in the U.S.</i>
1896	J.W. Million: <i>State Aid to Railways in Missouri</i>
1896	H.T. Newcomb: <i>Railway Economics</i>
1898	Wm. Larrage: <i>The Railroad Question</i>
1899	John B. Sanborn: <i>Congressional Grants of Land in Aid of Railways</i>
1903	B.H. Meyer: <i>Railway Legislation in the United States</i>
1903	Emory R. Johnson: <i>American Railway Transportation</i>
1905	Hugo R. Mayer: <i>Government Regulation of Railway Rates</i>
1905	Edwin A. Pratt: <i>Railways and Their Rates</i>
1905	W.M. Acworth: <i>Elements of Railway Economics</i>
1906	Walter L. Webb: <i>Economics of Railway Construction</i>
1907	Frank Parsons: <i>The Railway Trusts and the People</i>
1908	Lewis H. Haney: <i>A Congressional History of Railways in the U.S.</i>