

Transportation Engineering Suggested Text Listing

07-Tra-A1, Introduction to Transportation Engineering

Fundamentals of Transportation Engineering: A Multimodal Systems Approach/Jon D. Fricker, Robert K. Whitford
 Publisher: Pearson Prentice Hall, Upper Saddle River, NJ 07458, 2004.
 ISBN 0-13-035124-5

07-TRA-A2 Highway Design:

(1) "Geometric Design Guide for Canadian Roads" by Transportation Association of Canada (1999, with 2007 Update) This does not have an ISBN. Product Code PTM-GEODES99. This Guide is offered at a special reduced price for students. Please contact Transportation Association of Canada office at 613-736-1350, Ext. 221.

(2) Any Engineering Surveying Textbook which includes Earthwork calculations - Cuts, Fills and Mass Diagrams

(3) The following free downloads from the Internet on earthwork calculations:

http://www.u.arizona.edu/~mhickman/CE466/earthwork_notes.pdf

http://en.wikibooks.org/wiki/Fundamentals_of_Transportation/Earthwork

<http://www.globalsecurity.org/military/library/policy/army/fm/5-430-00-1/CH3.htm>

07-Tra-A3, Traffic Engineering

The candidates must be very thorough with the Canadian Capacity Guide for Signalized Intersections as this is the only publication which is strictly applicable to Canadian traffic conditions.

(1) Principles of Highway Engineering and Traffic Analysis

by Fred L. Mannering and Scott S. Washburn

- **Publisher: Wiley; 5 edition (March 27, 2012)**
- **ISBN-10: 1118120140**
- **ISBN-13: 978-1118120149**

(2) Traffic Engineering (4th Edition)

by Roger P. Roess, Elena S. Prassas, and William R. McShane

- **Publisher: Prentice Hall; 4 edition (July 4, 2010)**
- **ISBN-10: 0136135730**
- **ISBN-13: 978-0136135739**

(3) Traffic and Highway Engineering - Fifth Edition

Nicholas J. Garber and Lester A. Hoel

- **Publisher: Cengage Learning; 5 edition (January 1, 2014)**
- **ISBN-10: 113360515X**
- **ISBN-13: 978-1133605157**

(4) Canadian Capacity Guide for Signalized Intersections - 2008 edition

This guide can be freely downloaded from the following web site. This is the only book written for Canadian traffic conditions and it is very important that the students are thorough with the entire book.

<http://www.cite7.org/resources/documents/CanadianCapacityGuide2008.pdf>

The following web sites contain a wealth of information on the various topics listed in the syllabus:

<http://www.cite7.org/resources/documents/CanadianCapacityGuide2008.pdf>

http://www.telecom.otago.ac.nz/tele302/ref/Stallings_QT.pdf

http://www.cengage.com/resource_uploads/downloads/0324237049_48187.pdf

<http://users.crhc.illinois.edu/nicol/ece541/slides/queueing.pdf>

http://www4.ncsu.edu/~hp/SSME_QueueingTheory.pdf

http://home.iitk.ac.in/~skb/qbook/Slide_Set_1.PDF

http://www.itscanada.ca/about/standards_resources/index.html

<http://www.tc.gc.ca/eng/innovation/its-menu.htm>

<http://www.tc.gc.ca/eng/innovation/its-ontario-quebec-1593.html>

07-TRA-A4 Pavement Materials, Design and Management:

**(1) Asphalt Institute Manual Series MS-1: Thickness Design - Highways and Streets (ninth edition)
ISBN: 978-1-934-15401-4**

**(2) Asphalt Institute Manual: Mix Design Methods for Asphalt Concrete and other Hot Mix Types
(Sixth edition) ISBN: 978-1-934-15402-1**

**(3) Concrete Pavement Design, Construction and Performance by Norbert Delatte, Taylor & Francis,
2008 ISBN: 978-0-415-40970-4**

**(4) Pavement Design and Materials by A. T. Papagiannakis and E. A. Masad, John Wiley, 2008
ISBN: 978-0-471-21461-8**

(5) **Highway Engineering** by Paul H. Wright and Karen K. Dixon, Seventh Edition, John Wiley, 2004
ISBN: 978-0-471-26461-3

(6) **The following free downloads from the Internet on introduction to pavement management:**

<http://www.fhwa.dot.gov/infrastructure/asstmgmt/pmprimer.pdf>

<http://ntl.bts.gov/DOCS/pave.html>

<http://www.westvalley.edu/att/Pavement%20Management/index.htm>

<http://www.burlington.org/engineering/Pavement%20Management/PavementManagement.pdf>

07-Tra-A5 Transportation Planning and Demand Analysis

Juan de Dios Ortuzar, Luis G. Willumsen, *Modelling Transport*, 4th Edition, Publisher: Wiley, 2011, ISBN: 978-0-470-76039-0

07-Tra-B1 Transit Systems

VUCHIC, V.R. (2005). *Urban Transit: Operations, Planning, and Economics*. John Wiley & Sons, Inc. 2005. ISBN 0-471-63265-1

VUCHIC, V.R. (2007). *Urban Transit: Systems and Technology*. John Wiley & Sons, Inc. 2007. ISBN 0—471-75823X

07-TRA-B2 Intelligent Transportation Systems

(1) Authors: **Institute of Transportation Engineers, U.S. Federal Highway Administration**

Title: **Intelligent transportation primer**

Publisher: Institute of Transportation Engineers, Washington, D.C.

Year: 2000

ISBN: 0935403450

[Note: The entire book]

(2) Author: **Sussman, Joseph M.**

Title: **Perspectives on intelligent transportation systems (ITS)**

Publisher: Springer Science + Business Media, New York

Year: 2005

ISBN: 0387232575

[Note: The entire book]

07-TRA-B5, Railway Transportation

Railway Transportation Systems

Design, Construction, and Operation, 2nd Edition

by Christos N. Pyrgidis

07-TRA-B6 Highway Construction

Garber, N.J. and Hoel, L.A. *Traffic & Highway Engineering*. Fifth Edition, Cengage Learning, 2013.

07-TRA-B7 Transportation Economics

(1) Authors: **Millan, Pablo Coto and Inglada (Editors)**

Title: **Essays on Transport Economics**

Publisher: Physica-Verlag (A Springer Company)

Year: 2007

ISBN: 13 978-3-7908-1764-5 Physica-Verlag Heidelberg New York

[Note: Chapters 1, 4, 13, 17]

(2) Authors: Sinha, Kumeras C. and Labi, Samuel

Title: Transportation Decision Making , Principles of Project Evaluation and Programming

Publisher: John Wiley & Sons, Inc.

Year: 2007

ISBN: 0471747327

[Note: Chapters 1 to 11, 15, 16, 18, 20, relevant material in Appendixes]

(3) Authors: Meyer, Michael D. and Miller, Eric J.

Title: Urban Transportation Planning: A Decision Oriented Approach

Publisher: McGraw-Hill.

Year: 2001

ISBN: 0-07-242332-3

[Note: Chapters 5, 7, 8, 9]

(4) Authors: Khisty, Jotin C. and Lall, Kent B.

Title: Transportation Engineering: An Introduction, Third Edition

Publisher: Prentice Hall

Year: 2003

ISBN: 0-13-033560-6

[Note: Chapters 2, 15 and Appendix A]

07-Tra-B9 "Traffic Safety"

Listed below are several web sites, from which the material can be freely downloaded to assist you to prepare to write this exam that you can download.

http://www.tars.unsw.edu.au/downloads/Fleet_safety_final_for_web_with_cover.pdf

http://www.everestre.com/Portals/0/Documents/Everest_Model_Fleet_Safety_Program.pdf

<http://www.drivingforbetterbusiness.com/pool/benchmarking-workshop-report-jan-08-final.pdf>

<http://www.monash.edu.au/miri/research/reports/muarc166.html>

<http://www.oshatrain.org/courses/studyguides/719studyguide.pdf>

<https://www.fleetsafety.govt.nz/>

<http://eprints.qut.edu.au/7952/1/7952.pdf?referer=www.clickfind.com.au>

https://www.worksafe.vic.gov.au/_data/assets/pdf_file/0015/9510/safe_driving_web.pdf

<http://www.fleetsafetyinternational.com/sites/default/files/documents/Road%20Safety%20Challenge.pdf>

<http://www.jaspersnetwork.org/jaspersnetwork/download/attachments/5439709/Road+Safety+Audits+-+JASPERS.pdf?version=1&modificationDate=1387450051000>

http://www.lags.corep.it/doc/ICorsoSpec/Supporti%20tecnici/au_roadsafetysaudit-2ndedition.pdf

http://ec.europa.eu/transport/road_safety/topics/infrastructure/national-guidelines/pdf/malta-national-guidelines.pdf

<http://www.ite.org/technical/IntersectionSafety/RSA.pdf>

[http://www.rms.nsw.gov.au/roadsafety/downloads/guidelines for road safety audit practices full.pdf](http://www.rms.nsw.gov.au/roadsafety/downloads/guidelines%20for%20road%20safety%20audit%20practices%20full.pdf)

[http://safety.fhwa.dot.gov/tools/data tools/fhwas1140/](http://safety.fhwa.dot.gov/tools/data_tools/fhwas1140/)

[http://safety.fhwa.dot.gov/tools/data tools/fhwas1139/fhwas1139.pdf](http://safety.fhwa.dot.gov/tools/data_tools/fhwas1139/fhwas1139.pdf)

<http://www.fhwa.dot.gov/publications/publicroads/13mayjun/03.cfm>

<http://www.unb.ca/research/transportation-group/road-safety/guidelines.html>

<https://www.onlinepublications.austroroads.com.au/items/AP-R420-13>

<http://casr.adelaide.edu.au/staff/?pid=1165>

[http://www.fiafoundation.org/publications/Documents/road safety in france.pdf](http://www.fiafoundation.org/publications/Documents/road%20safety%20in%20france.pdf)

[https://cbrcc.curtin.edu.au/reports journal articles/aap%2031%20243-252.pdf](https://cbrcc.curtin.edu.au/reports_journal_articles/aap%2031%20243-252.pdf)

<http://www.ors.wa.gov.au/Documents/Strategies/ors-towards-zero-strategy.aspx>

<http://www.ors.wa.gov.au/Documents/Strategies/ors-towards-zero-strategy.aspx>

[http://c-marc.curtin.edu.au/local/docs/CMARC Fact Sheet1.pdf](http://c-marc.curtin.edu.au/local/docs/CMARC_Fact_Sheet1.pdf)

<http://www.ors.wa.gov.au/Documents/Strategies/ors-towards-zero-strategy-development.aspx>

<http://www.ors.wa.gov.au/Documents/Strategies/ors-towards-zero-discussion-paper.aspx>

<http://conf.tac-atc.ca/english/annualconference/tac2013/session5/rempel.pdf>

<http://alk.tiehallinto.fi/julkaisut/pdf/4000423e-veffectsofroadside.pdf>

http://www.worldbank.org/transport/roads/saf_docs/campaign.pdf

[http://www.carrsq.qut.edu.au/publications/corporate/road safety advertising fs.pdf](http://www.carrsq.qut.edu.au/publications/corporate/road%20safety%20advertising%20fs.pdf)

http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCKqFjAA&url=http%3A%2F%2Fwww.nhtsa.gov%2Fstaticfiles%2Fnti%2Fpdf%2F811727.pdf&ei=hDcKU-eeHI_iaTExlKgAg&usq=AFQjCNHbqpoHXfbfgZvFYi0iPqgoYegnHw&sig2=reecU5u191Jd9e8OhGt2CA&bvm=bv.61725948,d.cGU

<http://www.ieg-america.com/pdf/Automated%20Traffic%20Enforcement%20Technology%20Guidelines.pdf>

<http://www.assembly.ab.ca/lao/library/egovdocs/2006/alsg/153430.pdf>

[https://www.solgps.alberta.ca/programs and services/public security/peace officers/Publications/Automated%20Traffic%20Enforcement%20Guidelines%20-%202008.pdf](https://www.solgps.alberta.ca/programs%20and%20services/public%20security/peace%20officers/Publications/Automated%20Traffic%20Enforcement%20Guidelines%20-%202008.pdf)

<http://www.assembly.ab.ca/lao/library/egovdocs/2006/alsg/153430.pdf>

<http://www.iowadot.gov/traffic/pdfs/automatedtrafficeenforcementguidelines.pdf>

<https://www.ma.utexas.edu/users/blumberg/automated-enforcement.pdf>

http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=34&ved=0CDgQFjADOB4&url=http%3A%2F%2Froad-network-operations.piarc.org%2Findex.php%3Foption%3Dcom_docman%26task%3Ddoc_download%26gid%3D547%26lang%3Den&ei=VzsKU5OOFNLEoASq1oCADA&usg=AFQjCNGLmi5J1M5tvdNiUclb1Dy6CLUotQ&sig2=ZFdxduZlrx1TG-jKDaJxg

http://www.balticroads.org/downloads/28BRC/104_T06.pdf

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_729.pdf

http://ftp.dot.state.tx.us/pub/txdot-info/trf/red_light/auto_traffic.pdf

<http://itd.idaho.gov/ohs/HSP/FFY2014HSP.pdf>

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_746.pdf

<https://www.thunderbaypolice.ca/sites/default/files/pdfs/Traffic%20Enforcement%20and%20Safety%20Plan%202013.pdf>

http://www.piarc.org/ressources/documents/actes-seminaires06/c31-togo06/8712,togo_2006_Hollo.pdf

http://www.crash-network.com/Download/Crash_Analysis_Criteria_1.6.2.pdf

<http://www.ctre.iastate.edu/pubs/traffichandbook/5CrashAnalysis.pdf>

<http://ntl.bts.gov/lib/25000/25000/25079/AZ537.pdf>

<http://web.pdx.edu/~bertini/papers/crash.pdf>

https://www.google.ca/?gfe_rd=cr&ei=XOQKU_oNuiBmAKyv4C4Cg#q=University+of+Maryland+-+Vehicle+Accident+Analysis-+BUDT+733

<http://www.ktc.uky.edu/projects/analysis-of-traffic-crash-data-in-kentucky/>

<https://connect.ncdot.gov/resources/safety/Documents/TEAAS/Chapter%2015%20Analysis%20Techniques.pdf>

<http://library.oregonmetro.gov/files/safetyplan/2006CodeManualVersion1.0.pdf>

<http://www-nrd.nhtsa.dot.gov/Pubs/811754AR.pdf>

<https://osha.europa.eu/en/publications/e-facts/efact02/view>

http://www.etsc.eu/documents/PRAISE_ROAD_SAFETY_MANAGEMENT.pdf

http://www.dot.ca.gov/dist4/nilescanyon/docs/sr84_va_study_final.pdf

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_492.pdf

http://www.isprs.org/proceedings/XXXVIII/4-W13/ID_54.pdf

http://www.intrans.iastate.edu/reports/souleyrette_low_vol_report_w_cvr.pdf

http://safety.fhwa.dot.gov/local_rural/training/fhwasaxx1210/lrro_data.pdf

<http://casr.adelaide.edu.au/rsr/RSR2009/RS094023.pdf>

<http://www.cph.org.uk/wp-content/uploads/2012/08/road-traffic-accidents-a-review-of-evidence-for-prevention.pdf>

[http://www.ghdcanada.com/pdf/Enhancing Road Safety Management with GIS Mapping and Geospatial Database.pdf](http://www.ghdcanada.com/pdf/Enhancing_Road_Safety_Management_with_GIS_Mapping_and_Geospatial_Database.pdf)

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