



2295 Berry Lane, Suite 800
Pt. Roberts, WA 98281
Phone (360)945-2150
Fax (775)628-6494
eMail: certified@aptrex.com
www.aptrex.com

AMERICAN PUBLIC TRANSIT EXAMS INSTITUTE



CERTIFICATION HANDBOOK

The symbols that demonstrate Professional Certification for the Transportation Industry

CTFM® • CTCCM™ • CTSCM® • CTDVM® • CTDM® • CTEM® • CTBM®

2006 Edition

Table of Contents

Our Vision and Mission	3
What is the Aptrex Institute?	4
Who Qualifies for Certification?	4
International Transit Certification Review Board	4
Educational Development and Services	5
Testimonials	5
The Certification Process	6
The Application Review Process	7
The Examination Review Process	8
The Re-examination and Re-certification Process	9
Arrangements for candidates with Disabilities	9
The Examination Fees	10
Frequently Asked Questions – FAQ’s	11
Appendix A – Aptrex Institute Worksheet	12
Appendix B – Aptrex Institute Check-Off Form	13
Appendix C – APPLICATION FORMS	14
Appendix D - Basic Skills required by Certification	15
Appendix E - Certification Flow Chart	16
Appendix F - Sample Test Questions	17
Appendix G - Sample Orientation Outline	20

Our Vision and Mission

The APTREX Institute is internationally recognized as the public transportation industry's only accredited professional certification institute.

OUR VISION

Our vision is to advance the public transit industry through the continuous improvement of managers, supervisors and executives.

OUR MISSION

Our mission is to provide the transportation industry with a certification process that encourages industry development.

"FTA (the Federal Transit Administration) has made a significant commitment to workforce development and training through the National Transportation Institute and the Transportation Safety Institute....I am pleased that [APTREX] has taken advantage of some of these mechanisms to advance the improvement of the transit industry workforce." - Jenna Dorn, FTA Administrator

The American Public Transit Exams Institute is an Equal Opportunity Institution. The exams are offered to all eligible persons regardless of age, gender, race, national origin, disability or religion.

WHAT IS THE APTREX INSTITUTE?

The American Public Transit Exams Institute was founded in 1993 as an examination center for the public transportation industry, offering the only accredited professional certification program available for management and supervisory employees.

The goal of the APTREX professional certification is to foster professional development, encourage individual leadership and help establish standardized performance measurements in the transit industry.

The APTREX certification is similar to professional certification programs found in other industries, such as real estate, accounting and healthcare. The APTREX certification process is governed by the International Transit Certification Review Board (ITCRB), a professional body composed of senior executives and educators. The APTREX Certification Program was developed as a result of feedback from hundreds of transit authorities and in concert with the National Transit Institute, which is an educational arm of Rutgers University.

Since the program was established, the APTREX Certification has become recognized as a symbol of excellence in the transportation industry.

WHO QUALIFIES FOR CERTIFICATION?

The APTREX Certification Program is designed for all levels of transit managers – ranging from first line supervisors to senior executives. Candidates may also include first line employees such as operators or mechanics who are seeking career advancement.

The Levels of Certification are:

- | | |
|---------------------------------------------------------------------------------|---------------------|
| <input type="checkbox"/> CERTIFIED TRANSIT FIRST LINE MANAGER SM | CTFM ® |
| <input type="checkbox"/> CERTIFIED TRANSIT CONTROL CENTER MANAGER SM | CTCCM SM |
| <input type="checkbox"/> CERTIFIED TRANSIT SECTION MANAGER SM | CTSCM® |
| <input type="checkbox"/> CERTIFIED TRANSIT DIVISION MANAGER SM | CTDVM® |
| <input type="checkbox"/> CERTIFIED TRANSIT DEPARTMENT MANAGER SM | CTDM® |
| <input type="checkbox"/> CERTIFIED TRANSIT EXECUTIVE MANAGER SM | CTEM® |
| <input type="checkbox"/> CERTIFIED TRANSIT BOARD MEMBER SM | CTBM® |

INTERNATIONAL TRANSIT CERTIFICATION REVIEW BOARD

The International Transit Certification Review Board (ITCRB), composed of transit executives and educators, oversees the certification process. It is the accrediting body that ensures the integrity and confidentiality of the certification process.

EDUCATIONAL DEVELOPMENT AND SERVICES

The APTREX Institute provides a variety of training and educational services, including staff assessment, orientation, training and development.

The Institute operates under several cooperative agreements with training institutions and assessment centers. These include: the National Transit Institute (development opportunities); the Leadership Dynamics Group (orientation, assessment, training and leadership); Franklin Covey (management and leadership training); and the DMT Group, headed by Dr. Eleanor DiPalma (education and development).

TESTIMONIALS

"As a transit professional, it is a distinguished honor to receive certification from the nationally recognized APTREX Institute. The certification process -- based on experience and education in areas such as business, management, and operations -- serves as a benchmark ... by establishing a higher degree of excellence in the transit profession. This measure of excellence promotes higher professional standards and achievements for the employee and MARTA, and helps justify the public's trust in our services. Employees receiving the certification are held in high esteem by the organization and serve as role models for others to follow and emulate. This certification process has been a valuable experience that I would encourage and recommend for others interested in distinguishing and promoting themselves as professional managers and leaders in transit organizations." --- **Kenneth McDonald, CTDM®, Metropolitan Atlanta Transit Authority**

"This has been a great experience and an opportunity to learn, grow and develop my knowledge. Obviously, being prepared makes a big difference. Once again, thank you and the APTREX Institute for the opportunity to measure-up some industry knowledge. Hopefully my experiences will persuade other individuals to take active participation in their career development." --- **David Olmeda, CTDM®, San Mateo County Transit District**

THE CERTIFICATION PROCESS

The APTREX certification process involves three stages: a one-day orientation session, a review of the candidate's application by the ITCRB, and an examination. The certification process can be completed in 60 days.

1) THE ORIENTATION PROCESS

The one-day orientation session provides candidates with a complete overview of the certification process, helps prepare them for the exam, and offers study guide suggestions. The orientation helps candidates select the certification level appropriate to their education and experience. Taking the orientation session is not a requirement for certification, but it is recommended.

2) THE APPLICATION REVIEW

The Application Review Committee of the Board reviews each candidate's application package for completeness, verifies the information provided, and determines eligibility for the certification exam.

The application review process results in a calculation of points, based on the candidate's education, experience, and organizational responsibilities. A minimum number of points must be met in order to be eligible to take the exam. The review process may take up to thirty-days. Once complete, the applicant is notified of the results and, if all requirements were met, an exam is scheduled.

3) THE CERTIFICATION EXAM

The Certification Exam is designed to test the applicant's knowledge of the transit industry in the areas of business, management and operations. Testing takes two-hours and consists of 100 to 125 multiple-choice questions and one essay question. Testing can be conducted at the candidate's transit property, or at another mutually agreed upon location.

The number of exam questions depends on the level certification sought. The number of test questions and minimum score required can be found in the [Exam Review](#) section. Once the exam is completed, the points earned are calculated together with total number of review points to arrive at a final grade.

A minimum passing grade is required in order to achieve certification. This chart can be viewed under the section called [Total Points](#).

THE APPLICATION REVIEW PROCESS

The application review process involves the calculation of base points measured against a candidate’s education, experience, budget responsibility, organizational responsibility. The total number derived from this section is then added to the exam grade to reach a total grade. The total grade required for each level of certification is posted on the chart called [Total Points](#).

The application points chart below can be used to calculate the points earned, according to the candidate’s education and experience. For example, an Associates degree merits 30 points; budget responsibility of \$25 million merits 40 points.

Education	Masters	Bachelors		Associates	High School
Points Credited	75	60		30	15
Experience	>12 yrs	10-12 yrs	7-9 yrs	4-6 yrs	2-4 yrs
Points Credited	75	60	45	30	15
Budget	> 40m	20-40m	5-19m	300k – 4m	<300k
Points Credited	50	40	30	20	10
Responsibility (+/- 10%)					
Internal Management	15%	25%	50%	75%	95%
External Management	85%	75%	50%	25%	5%
Points Credited	50	40	30	20	10

Use this section specific to the type of certification seeking.

	CTEM*	CTDM	CTDVM	CTSCM	CTFM/CTCCM
Direct Reports (minimum)	6	5	3	1	1
Points Credited	85	65	45	25	5
Indirect Reports (minimum)	>500	>100	>25	>5	0
Points Credited	85	65	45	25	5

* CTBM – Please contact the Institute for further information

THE EXAMINATION REVIEW PROCESS

Seventy percent is required to meet the minimum standards set by the ITCRB in order to be certified. See the [Total Points](#) chart.

THE EXAM QUESTIONS AND EXAM POINTS CHART

	CTEM	CTDM	CTDVM	CTSCM	CTFM/ CTCCM
# Exam Questions (2 points each)	125	125	125	100	100
Maximum Total Points – Exam	250	250	250	200	200
Maximum Total Points – Written Exercise	100	100	100	100	100
Maximum Exam Total Points	350	350	350	300	300
Minimum Passing Grade for the Exam Only	245	245	245	210	210

THE TOTAL POINTS CHART FOR CERTIFICATION

This chart includes the total points required from the application process plus the exam process.

	CTEM	CTDM	CTDVM	CTSCM	CTFM / CTCCM
Application Points	420	330	240	150	60
Exam Total Points	350	350	350	300	300
To Be Certified					
Maximum Points	770	680	590	450	360
Minimum Points	665	575	485	360	270

THE EXAMINATION SCHEDULES

Examinations are scheduled quarterly. Check with the Institute for the times and dates.

THE RE-EXAMINATION AND RE-CERTIFICATION PROCESS

THE NEED TO RETAKE THE EXAMINATION

The Institute will notify candidates who require a re-examination. Candidates are eligible for a one-time re-examination at a reduced fee within 30-days of receipt of a failing grade (see the [fee schedule](#)). The full examination rate applies thereafter. The maximum number of times a candidate can take the same exam in a twelve-month period is three. Candidates may also be required to show proof of additional training on the third examination attempt.

THE RE-CERTIFICATION PROCESS

To maintain the certification and use of the APTREX designation, re-certification is required every three-years. One must maintain a minimum of 10 CEUs/IEUs (Educational Units) during this three-year period. Educational Units are offered by most training and educational schools, and transit system training programs. The institute will give 90-days notification prior to certification expiry. Certificate holders are required to keep their profiles current. The re-certification fee can be found on the examination fee schedule. Expired certifications require full application and full fee processing. Re-certification does not require testing.

ARRANGEMENTS FOR CANDIDATES WITH DISABILITIES

Candidates requiring any special arrangements due to disabilities can do so by making a written request. The Institute complies with the American with Disabilities Act and strives to ensure that no individual with a disability is deprived of the opportunity to take the examination.

THE EXAMINATION FEES

Candidates must submit the appropriate fee with their application. The examination fees are as follows:

FEE SCHEDULE (US \$)	MEMBER *	NON-MEMBER
C1 - CTBM and CTEM	\$ 899.00	\$1099.00
C2 - CTDM	\$ 899.00	\$ 1099.00
C3 - CTDVM	\$ 899.00	\$ 999.00
C4 - CTSCM	\$ 899.00	\$ 999.00
C5 - CTFM and CTCCM	\$ 899.00	\$ 999.00
RE-EXAMINATION	\$ 699.00	--
RE-CERTIFICATION EVERY THREE-YEARS	\$ 399.00	--
ORIENTATION (MAX 20 STUDENTS)	\$3900.00	\$3900.00
STUDY GUIDE SET	\$109.00	\$119.00
* (Eligibility includes being an active member of APTA, CUTA, or UITP)		

(subject to change)

FREQUENTLY ASKED QUESTIONS – FAQ'S

DO I GET A REFUND IF MY APPLICATION IS NOT ACCEPTED? The \$25.00 APPLICATION FEE IS NON-REFUNDABLE. THE CERTIFICATION TEST FEE IS REFUNDABLE – AS LONG AS 30-DAYS NOTICE IS GIVEN TO CANCEL.

WHERE ARE THE EXAMS HELD? THE EXAMS ARE HELD EITHER AT YOUR PLACE OF WORK, OR AT A MUTUALLY AGREED UPON LOCATION.

IS THERE AN ORIENTATION PROGRAM AVAILABLE? YES. APTREX PROVIDES ORIENTATION CLASSES FOR A MAXIMUM OF 20 STUDENTS. ORIENTATION SESSIONS ARE ALSO PROVIDED BY THE PARTNER INSTITUTIONS AFFILIATED WITH APTREX. CHECK WITH OUR OFFICE TO GET A CURRENT LISTING.

HOW LONG WILL IT TAKE TO PREPARE FOR THE EXAM? THIS DEPENDS ON THE YOUR LEVEL OF EXPERIENCE AND EDUCATION. PLEASE SEE OUR SECTION CALLED [EXAM PREP](#) AND TAKE ADVANTAGE OF THE ORIENTATION PROGRAM AVAILABLE.

WHEN WILL I KNOW IF I AM CERTIFIED AFTER TAKING THE EXAM? IT TAKES UP TO 30-DAYS FOR NOTIFICATION.

WHAT HAPPENS IF I DON'T PASS THE EXAM? YOU ARE ELIGIBLE FOR A ONE-TIME RE-EXAMINATION WITHIN 30-DAYS OF RECEIPT OF YOUR GRADE. THIS RE-EXAMINATION WILL BE AT A REDUCED FEE (SEE THE [FEE SCHEDULE](#)).

HOW ARE EXAMS DEVELOPED? THE INTERNATIONAL TRANSIT CERTIFICATION REVIEW BOARD (ITCRB) OVERSEES THE EXAM DEVELOPMENT. THE BOARD CONSISTS OF EDUCATORS, TRANSIT PERSONNEL AND ADMINISTRATORS.

DOES RE-CERTIFICATION REQUIRE TESTING? NO. A CHANGE IN THE PROCEDURES ADOPTED IN NOVEMBER 2004 THAT ELIMINATED THE NEED TO RE-TEST. ONE MUST DEMONSTRATE THAT EDUCATIONAL UNITS HAVE BEEN MET.

WILL MY COMPANY BE NOTIFIED OF MY EXAM RESULTS? YES, YOUR COMPANY WILL BE NOTIFIED BY LETTER.

APPENDIX A – APTREX INSTITUTE WORKSHEET

This worksheet will help you determine the appropriate certification level. Complete this chart and return to the [application review table](#) and enter the information.

Certification Type Seeking _____	
Education	
Points Credited	
Experience	
Points Credited	
Budget \$_____	
Points Credited	
Responsibility (+ / - 10%) % Internal _____ % External _____	
Points Credited	
Direct Reports_____	
Points Credited	
Indirect Reports_____	
Points Credited	
TOTAL POINTS →	

1. Application Review "Total Points" Above: _____

Next, look up the range of points required under the [total point's chart](#) and write the minimum points required in the space below.

2. Minimum Range of points required: _____.

Enter #2 → _____ (minus) Enter #1 → _____ = _____ Exam Grade

This will give one a basic idea of what grade is needed on the examination in order to be considered for certification.

APPENDIX B – APTREX INSTITUTE CHECK-OFF FORM

Please use this check-off sheet to ensure that all materials required for the certification process have been included in your package prior to mailing it to APTREX.

If you should have any questions about this process, please contact APTREX at 1559 Ocean View Lane, Suite 800, Point Roberts, WA. Tel: (360)945-2150 Fax(360)945-2151, email - certified@aptrex.com. Website: www.aptrex.com

CHECK-OFF FORM	
ü	Completed all sections of the Application Check Here When Done
ü	Attached all additional sheets of paper Check Here When Done
ü	Attached the (2) letters of Recommendation Check Here When Done
ü	Signed the Application Check Here When Done
ü	Included the payment for the test Made payable to: APTREX Institute or Purchase Order Check Number Check Here When Done
ü	Notarized the Application Check Here When Done
ü	Recent Photo Electronic Format 300 dpi Included Check Here When Done

Congratulations! You have completed a very important part of the process in becoming a Certified Transit Professional. Best of Luck!

APPENDIX C – APPLICATION FORMS

The applications for certification consist of two parts. Part 1 - application for certification. Part 2 - recommendation application forms.

Both of these forms can be found at the website – www.aptrex.com or by calling the Institute offices.

Applications are in Adobe Acrobat – PDF format.

Part A - Application for Certification Form

Part B - Recommendation Application Form
(References and letters of recommendation can be the same person.)

APPLICATIONS FOR RE-CERTIFICATION

The applications for re-certification consist of only Part 1.

This Form can be found at the website – www.aptrex.com or by calling the Institute offices.

APPENDIX D - BASIC SKILLS REQUIRED BY CERTIFICATION

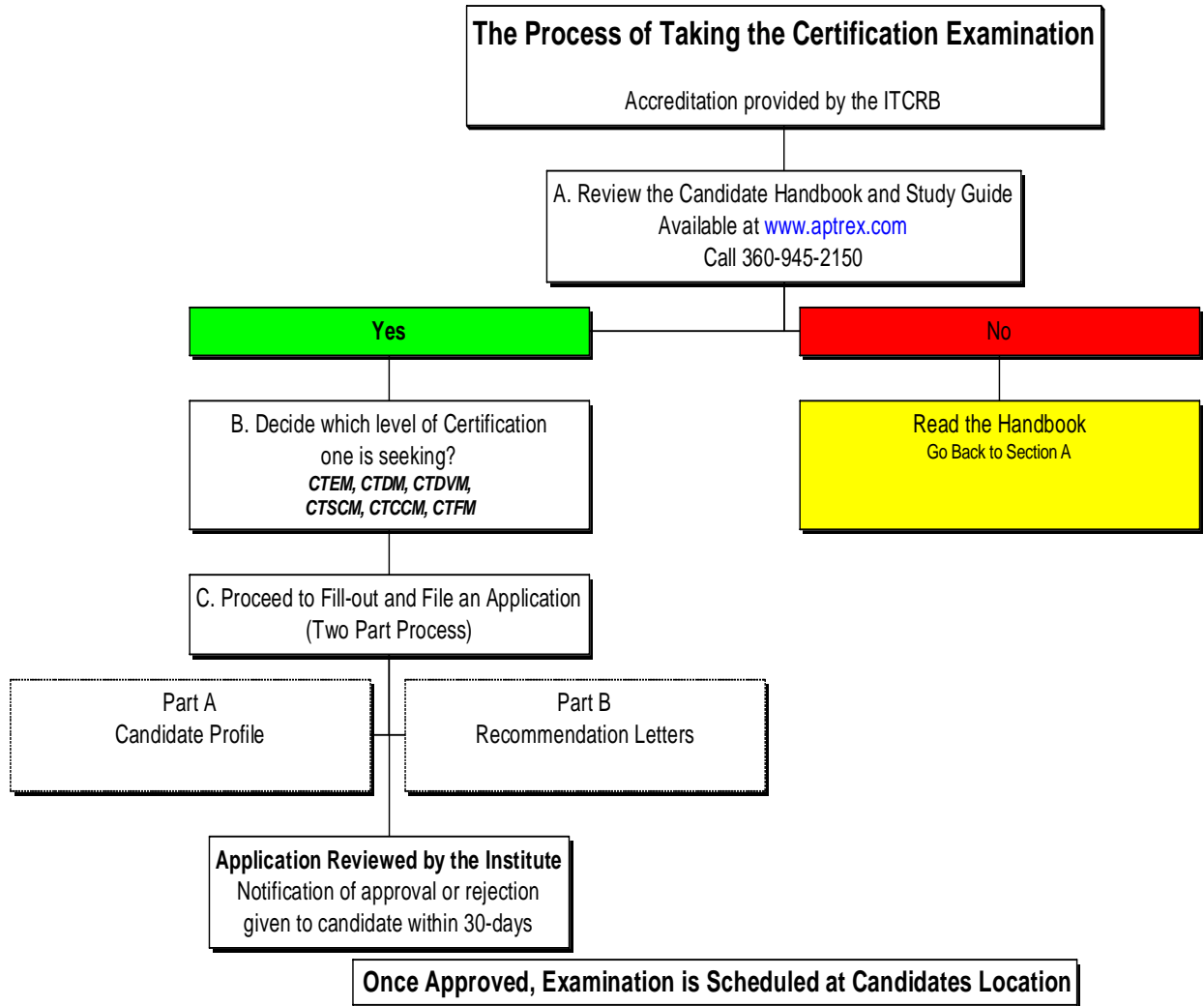
The certification testing requirements capture the main topics of experience and/or education required in each of the certification categories.

Course Name	C1	C2	C3	C4	C5	Notes
Accounting / Budgets	✓	✓	✓	✓	✓	
Business Planning	✓	✓	✓			
Advertising/Marketing	✓	✓	✓			
Applied Economics	✓	✓	✓	✓		
Communication	✓	✓	✓	✓	✓	
Customer Service	✓	✓	✓	✓	✓	
English	✓	✓	✓	✓	✓	
Reading, Writing, Vocab	✓	✓	✓	✓	✓	
Financial Management	✓	✓	✓			
Government Relations	✓	✓				
Labor Management	✓	✓	✓	✓	✓	
Leadership	✓	✓	✓	✓	✓	
Math	✓	✓	✓	✓	✓	
Mgmt Information Systems	✓	✓	✓	✓	✓	
Mgmt Practices and Theory	✓	✓	✓	✓	✓	
Organizational Behavior	✓	✓	✓	✓	✓	
Law (OSHA, EPA, ADA)	✓	✓	✓	✓	✓	
Performance Management	✓	✓	✓	✓		
Human Resource Mgmt	✓	✓	✓	✓	✓	
Planning/Schedule	✓	✓	✓	✓		
Federal/State/Local	✓	✓	✓			
Problem Solving	✓	✓	✓	✓	✓	
Safety/Security	✓	✓	✓	✓	✓	
Sociology	✓	✓	✓	✓		
Statistics	✓	✓	✓	✓		
Strategic Planning	✓	✓				
Transportation Management	✓	✓	✓	✓	✓	

Legend:

- C1 = CTEM and CTBM;
- C2 = CTDM;
- C3 = CTDVM;
- C4 = CTSCM;
- C5 = CTFM and CTCCM

APPENDIX E - CERTIFICATION FLOW CHART



APPENDIX F - SAMPLE TEST QUESTIONS

SAMPLE TEST – MULTIPLE CHOICE QUESTIONS

- 1) Which Government Transportation Agency is more involved with public transportation?
 - a) Federal Highway Administration
 - b) Federal Aviation Administration
 - c) United States Department of Transportation
 - d) Federal Transportation Administration
 - e) None of the above

- 2) What best describes an Operating Expense?
 - a) Constructing a new transportation building
 - b) Buying new buses and trains
 - c) Labor, benefits and expendable supplies
 - d) Lease or rent payments on long term contracts
 - e) None of the above

- 3) What are the three components of System Security?
 - a) Vulnerability, Chemicals, Safety
 - b) Risk, Bombs, Drugs
 - c) Safety, Risk, Disaster
 - d) Risk, Threat and Vulnerability
 - e) None of the above

- 4) What are the key points of Terrorism?
 - a) Intent, Motivation and Act
 - b) Intent, Risk, Threat
 - c) Risk, Safety, Bombs
 - d) Act, Implementation, Design
 - e) None of the above

- 5) Why should you use a performance appraisal?
 - a) Review work related behavior
 - b) Promotion
 - c) Salary adjustments
 - d) Feedback to the subordinate
 - e) All the above

- 6) In a discharge of an employee, who has the burden of proof at the hearing?
 - a) the employee
 - b) the company
 - c) the union
 - d) both the employee and the company
 - e) None of the above

- 7) What does OSHA stand for?
- a) Other Safety and Hazards Act
 - b) Occupational Safety and Hazards Administration
 - c) Occupational Safety and Health Administration
 - d) Occupational Society and Hazards Act
 - e) None of the above
- 8) Select the best definition for this transit term? (Single Vehicle Transit Trip)
- a) A trip in which a person uses only one route
 - b) A trip in which a person uses only one vehicle
 - c) A trip in which a person only uses buses
 - d) A trip in which a person only rides one block
- 9) Select the best definition for this transit term? (Vehicle Miles Operated)
- a) The sum of all miles operated regardless of passengers on-board
 - b) The sum of all miles operated only when passengers are on-board
 - c) The sum of all miles operated to and from the route
 - d) The sum of all miles operated only when in service
- 10) On the Internet, the following phrase "www.aptrex.com" is known as?
- a) Network location
 - b) Network protocol
 - c) Network path name
 - d) Network file name
 - e) None of the above
- 11) Transit systems have many benefits to society, select the one that does not apply?
- a) reduce energy consumption
 - b) economic development
 - c) creation of jobs
 - d) greater retail sales
 - e) None of the above
- 12) One full six-car heavy rail subway train is equal to how many moving automobiles if they were in a straight line moving at 15mph?
- a) 15
 - b) 25
 - c) 45
 - d) 68
- 13) How many transit systems are there in the United States and Canada?
- a) less than 1000
 - b) more than 1000, less than 3500
 - c) more than 3500, less than 5000
 - d) more than 5000, less than 7500

Directions: In the next series of questions, each sentence has a word or phrase underlined. Below each sentence are four other words or phrases. You are to choose the one word or phrase which would best keep the meaning of the original sentence if it were substituted for the underlined word.

- 14) A number of loopholes still remain in the campaign contribution law.
 a) Unprofitable sections
 b) Illogical contradictions
 c) Descriptions for cheating
 d) Ways of evading rules
- 15) Grounded whales often struggle fruitlessly to reenter deep water.
 a) Violently
 b) Desperately
 c) In vain
 d) At length

ASSESSMENT INDICATOR	
Transportation <i>Management</i> <i>Governance</i> <i>Safety / Security</i>	48%
Problem Solving	4%
Math, Statistics	6%
English <i>Grammar</i> <i>Vocabulary</i> <i>Reading</i> <i>Writing</i>	10%
Management <i>Communication</i> <i>Leadership</i> <i>Human Resources</i> <i>Governance</i> <i>Planning</i> <i>Performance</i>	27%
Information Technology	5%
	100%
ANSWER KEY	
1. D	9. A
2. C	10. A
3. D	11. E
4. A	12. D
5. E	13. D
6. B	14. D
7. C	15. C
8. B	

APPENDIX G - SAMPLE ORIENTATION OUTLINE



OUTLINE of ORIENTATION

- I. Introduction to Certification**
- II. Introduction to Transportation Systems**
- III. Organizational Structure and Governance**
- IV. Effective Transit Leadership, Management and Operations**
- V. Performance Management and Finance**
- VI. Technology, Environment, Safety and Risk Management**
- VII. Business Planning**
- VIII. Elements of Test Taking and Practice Test**
- IX. Questions and Answers**