UMass Transportation Center
UMass Transit Services

4) Provide a tool for recruitment and training to replace the aging workforce.
3) Offer certificate to college students who are interested in the transit profession.
2) Why? Aging Workforce
   - 50% of the industry is expected to retire within the next 5 - 10 yrs
   - Industry is expected but with th baboomer retirement will lose that experience

What? - Workforce Development Training Programs
   - Current programs focus on Professional development of mid-level managers
   - Leadership APTA, National Transit Institute, Professional Certifications
   - Programs for skilled workers
   - APTA Blue Ribbon Panel States Workforce development needs:
     - Develop university curriculum
     - Recruit K-12
     - Partnerships and Collaboration
     - Funding for programs to make transit an appealing job choice

How? - Recruitment of Young People
   - Attract young, well educated individuals into transit
   - Train the next generation
   - Side both educational and practical experience
   - Tap into community college resources

Certificate Program in Transit Management and Operations
Department of Civil and Environmental Engineering

Program Objectives
1) Generate awareness among college students about job opportunities and career pathways in the U.S. transit industry
2) Offer certificate to college students who are interested in the transit profession.
3) Serve as a model for public transit operators and university partnerships.
4) Provide a tool for recruitment and training to replace the aging workforce.
5) Encourage collaboration between UMass Transit, UMass Transportation Center and CTtransit.

Three Main Issues Facing Transit and Workforce Development
1) WHY is it such a hot topic?
2) WHAT measures have been taken already?
3) HOW are we to solve the dilemma?

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Certificate Conception
- Lack of programs focusing on college students
- Student drivers staying in industry post graduation
- 2011 FTA Workforce Development grant
- Joint venture between UMass Transit, CTtransit and the UMass Transportation Center

Core Courses:
- Public Transportation Systems CEE 410/510
  - Introduction to public transportation systems and focuses on the many facets of public transit
- Intelligent Transportation Systems CEE 418/518
  - Critical review and analysis of intelligent transportation systems as it applies to the management and operation of surface transportation facilities and the technologies applicable

Elective Courses:
- Accounting, Civil Engineering, Finance, Political Science, Public Policy, Marketing, Economics, Regional Planning, Logistics, Law

Anticipated Outcome
- 12-18 students per year
- Model program/partnership for others to follow
- Online courses
- Open up certificate program to the industry

UMass Transit Services
- Established 1969
- Professional managed student workforce
- Contract carrier for the Pioneer Valley Transit Authority
- 12 routes, 2.7 million passengers/yr, one million vehicle miles/yr

UMass Transportation Center
- U.S. DOT Region One UTC Consortium member
- Promotes and conducts campus transportation training and research activities
- Cross collaboration with other departments

CTtransit
- State-Ownedbus service under CoreDOT
- Managed by the HNS Management Inc.
- 400 buses, 26.4 million passengers/yr, travel 12 million vehicle miles/yr

Program Effectiveness
- Number of students currently enrolled
- Number of graduate certificate recipients
- Number of undergraduate certificate recipients
- Total number of certificate recipients
- Average completion time in days
- Total number of students to partake in program

Schedule to Complete the Certificate Program in 1.5 yrs

Spring 1
- Course Work
  - 1. CEE 440/540 - Public Transit Systems
  - 2. Elective
- Internship
  - 50 hrs internship with a public transit agency

Summer
- Internship
  - 50 hrs at a public transit agency
  - Intern with transit agencies such as:
    - UMass Transit Services
    - CTtransit
    - MBTA
    - PVTA
    - MTA
    - And many, many more!

Fall 1
- Course Work
  - 1. CEE 418/518 - ITS
  - 2. Elective
- Internship
  - 50 hrs internship with a public transit agency

Spring 2
- Course Work
  - 1. Elective
- Internship
  - 50 hrs at a public transit agency
  - Suggested areas of internship:
    - Projects based off of individual internships such as routing analysis, performance evaluation, surveying, schedule evaluation, etc.