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.

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

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

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

Certificate Program in Transit Management and Operations
Allan Byam, Krystal Oldread, UMass Transit Services

Program in 1.5 yrs
1. Elective
   - CEE 418 / 518 - ITS
   - 50 hrs UMass Transit (~3.5 hr/wk)
   - Projects based off of individual interests such as routing analysis, performance evaluation, surveying, schedule evaluation, etc

2. Elective
   - 100 at CTTransit or equivalent and summer projects
   - 250 Hours (~20 hrs/wk)

Elective Courses:
- Accounting, Civil Engineering, Finance, Political Science, Public Policy, Marketing, Economics, Regional Planning, Logistics, Law
- Critical review and analysis of intelligent transportation systems as it applies to the transportation facilities and the technologies applied

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 419/18
- Projects based off of individual interests such as routing analysis, performance evaluation, surveying, schedule evaluation, etc

Program Effectiveness
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

Student Satisfaction
- Overall impression of the workshop (1-10)
- Content rating (1-10)

Job Placement
- Number of days it took to find a job post-graduation
- Percentage of students working in transit
- Salary range

Why? - Aging Workforce
- 50% of the industry is expected to retire within the next 5 - 10 yrs
- Industry is experienced but with the baby boomer 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 State 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
- Provide both educational and practical experience
- Tap into community college resources

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?

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

Structure
- Matriculated students
- 5 courses (2 required + 3 elective)
- 400 hour internship
- Split between UMass Transit and CTTransit
- Professional Development

Why? - Recruitment
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- Number of undergraduate certificate recipients
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- Average completion time in days
- Total number of students to partake in program

Workshop
- Number of attendees
- Overall impression of the workshop (1-10)
- Content rating (1-10)

Schedule to Complete the Certificate Program in 1.5 yrs

Spring 1
Course Work
1. CEE 410/10 - Public Transit Systems
   2. Elective

Internship
50 hrs UMass Transit (~3.5 hr/wk)
- Operations Department
- Training Department

Summer
Professional Development Workshop
250 Hours (~20 hrs/wk)
- 100 at CTTransit or equivalent site agency
- 150 at UMass Transit assisting with summer projects

Fall 1
Course Work
1. CEE 415/15 - ITS
   2. Elective

Internship
50 hrs UMass Transit (~3.5 hr/wk)
- Maintenance Department
- Paratransit Department
- Systems Admin. Department

Spring 2
Course Work
1. Elective

Internship
50 hrs UMass Transit (~3.5 hr/wk)
- Projects based off of individual interests such as routing analysis, performance evaluation, surveying, schedule evaluation, etc