



Citizen School Transportation Committee

To search diligently for ways to maintain the existing bus transportation department.

Public Hearing

August 16, 2012

CTC Members

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Presentation Agenda

- CTC charge
- Five Areas of Research
 - Safety
 - Social Factors & Intangibles
 - Level of Service
 - Cost Analysis
 - Potential Sites
- Next Steps
- Citizen Comments

CTC Charge

To search diligently for ways to maintain the existing bus transportation department.



Areas of Research

- Safety
- Social Factors and Intangibles
- Level of Service
- Cost Analysis
- Potential Sites

FACT:

School buses are the safest mode of transportation for getting children back and forth to school.

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION

STUDENT FATALITIES ANNUAL AVERAGE DURING NORMAL SCHOOL TRAVEL HOURS

TRAVELING BY TEEN DRIVER (58%) (23%) TRAVELING BY ADULT DRIVER



TRAVELING BY SCHOOL BUS (1%)

NHTSA FARS 2001-2008 (FINAL), 2009 (ARF)

Bus Safety

- Driver Training
- Bus Inspection
- Accidents
- Driver Turnover
- Level-of-Service

Bus Safety

Driver Training

- 8 hours required
- 12+ hours offered provided
 - Bus Evacuation
 - First Aid
 - Bullying
 - Maneuvering

Bus Safety

Bus Inspections

	% Fail
CPS, CCHS	18
Fitchburg, First Student	62
Sudbury, First Student	40

Bus Safety

Bus Accidents

Massachusetts Registry of Motor Vehicles records of school bus accidents 2002-2010	
	proportion caused by school bus driver
Concord	<i>0.31</i>
Lincoln	<i>0.50</i>
Sudbury	<i>0.21</i>
Carlisle	<i>0.50</i>
Bedford	<i>0.56</i>
Lexington	<i>0.47</i>
State Total	<i>0.24</i>

Bus Safety

Annual Turnover

- In-house bus services:
 - Concord 8% (4% prior to 2010)
 - Foxboro 4%
 - Cohasset 2%
- Private bus service:
 - First Student 10%

Bus Safety

Level-of-Service

District	Enrollment	Routes	Stops	Students per stop	Stops per route
CCHS	1209	43	600	2.02	13.95
Concord k-8	1991	95	1595	1.25	16.79
LSRHS	1601	34	563	2.84	16.56
Sudbury k-8	3102	59	1332	2.33	22.58
Lincoln k-8	1149	14	266	1.90	19.00

Social Factors

What makes the Concord School
Bus System work?

Personnel

Location

Ownership

Service

Social Factors

Personnel

- Bus drivers
- Mechanics
- Manager
- Support Staff
- Students

Social Factors

Location on School Property



- Site is secure.
- There is adequate work space for drivers and staff.
- Extra travel time and fuel is minimized.
- Maintenance can be done on site.
- Buses are readily available in case of emergency.

Social Factors

Ownership

- Buses are owned by the school districts.
- Drivers take pride in 'their' buses.
- As part of the school community the staff is responsible for and takes pride in the quality of the bus system.

Social Factors

Service

- Drivers and managers know the roads and set the routes.
- Safety is a major factor in setting the routes.
- Maintenance is done on site and is less expensive.
- Support staff are quick to respond to parental concerns.

Social Factors

The Question Before Us

As the district considers other options, how important are the following?

- Service.
- Continuing to own our buses.
- Doing our own maintenance.
- Location within Concord.
- Retaining staff as employees.
- Keeping the divisions of the transportation staff together.

Social Factors

The Inconvenient Truths

- September will come year after year.
- There will always be students.
- There must be school buses.
- Fuel costs money and drivers expect to be paid.
- The taxpayer will pay for transportation whether it is run by the schools or contracted to a private company.

Social Factors

Other Uses of Transportation System

- Buses NOT just for getting to school
- Extra-curricular activities
 - field trips;
 - athletics;
 - late buses;
 - private schools; and
 - Concord Recreation summer camp
- Local Emergency Preparedness



Social Factors

Local Emergency Preparedness

- Overseen by the Local Emergency Planning Committee and the Fire Department
- Procedure manual
 - Event
 - Building (location)



Social Factors

Local Emergency Preparedness

- Need to move people
 - Ambulance
 - Vans
 - CPS and the CCHS buses (also shelter in place)
- Procedures in place
- An example

Social Factors

Local Emergency Preparedness comparison

Town	Bus	LEP Plan	Uses Buses	Buses Located
Concord	Town	Yes	Yes	Concord
Carlisle	Bedford Charter		No	Bedford
Acton	Town	Yes	Yes	Acton
Bedford	Bedford Charter		Yes	Bedford
Lexington			No	

Cost Analysis

School Transportation

- Our approach is to ensure an “apples-to-apples” comparison of in-district vs outsourcing costs
- In-district Expenses and Projections through 2015
- Invitation For Bid data from November and April
- Published school administration cost analysis

Cost Analysis

Initial Conclusions

- Significant cost drivers in administration projections for in-district cost include:
 - Personnel benefits
 - Bus replacement
 - 8 buses are included in both 2014 and 2015, at a cost of \$760,000 each year
 - Transportation facility replacement
 - Worst-case estimate of \$2,000,000 is included

Cost Analysis

Bus Replacement

- Current fleet consists of 36 buses purchased between 2000 and 2010
 - Average mileage per bus is 66,000 miles
 - Expected useful life is 200,000 miles
- Current projections assume bus replacement of 16 buses in 2014 and 2015

Cost Analysis

Transportation Facility

- Current new high school building plans eliminate existing bus depot
- Cost estimates by school administration of \$2M to replace transportation infrastructure on an alternate site
 - Purchasing land and replacing 2 buildings and fuel depot as well as bus parking and security

Cost Analysis

Next Steps

- Additional questions for administration
- Attempt to project 10 year costs for in-district service
- Attempt to develop range of cost estimates for vendor-provided service based on third-party studies

Cost Analysis

Current Facility

- Approximately 2 acres
- 60 x 65 three bay maintenance building
- 24 x 60 modular office building includes:
 - day room/training room
 - 2 offices
 - reception area



Cost Analysis

Current Facility

- 5000 gallon fuel tank and pumping station



- Safety fencing and lighting



- Additional buildings



Cost Analysis

Facility Replacement

Single Building Solution for maintenance and administration
Approximately 4800 square feet (60x80)

- 2 / 3 bays
- office space
- day room/training room
- reception area
- restroom facilities
- storage area

Rough estimate cost for above structure:

\$480,000-\$600,000 start to finish (foundation thru building completion)

Cost Analysis

Facility Replacement

Additional costs and variables
that are site dependent

- Land costs
- Site preparation (cleaning, draining)
- Utility hook-up
- Septic work
- Security (lighting, fencing)
- Paving - rough estimates of \$185k - \$250k for 2 acre lot
grading and paving only

Potential Sites

Current 'Best' Options

Concord-Carlisle Regional High School

Current location:

pro: no replacement costs

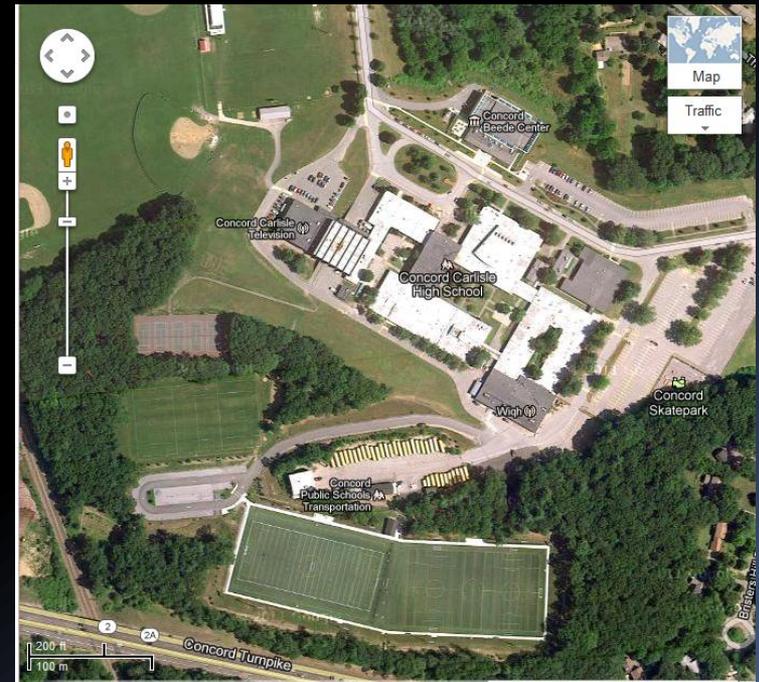
con: new high school siting

Elsewhere on property:

pro: no land costs

con: replacement costs

*RSC 5/22/12 vote to exclude site from consideration by TAC



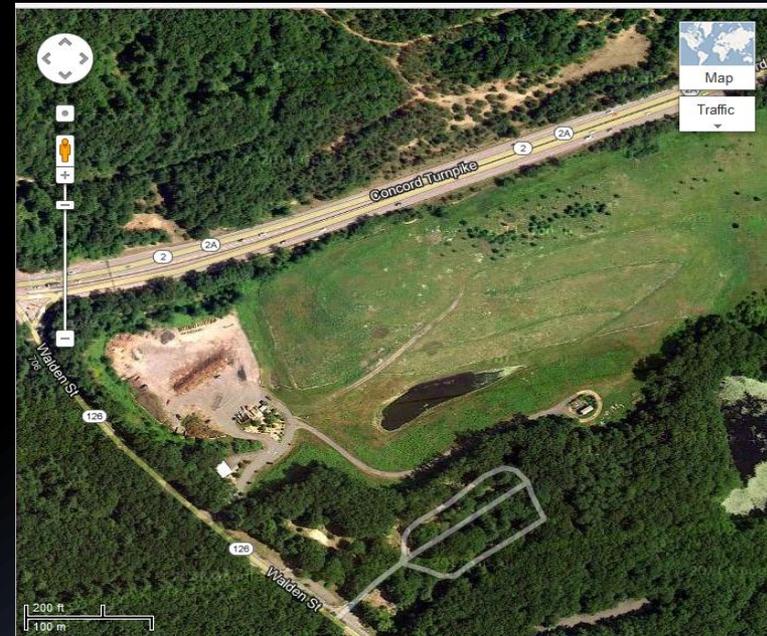
Potential Sites

Current 'Best' Options

Town of Concord old Landfill

pros: no land purchase costs
location is excellent
not in water conservancy
district

cons: site prep costs
replacement costs



Potential Sites

Other Option?

Concord Public Schools, Sanborn property

pros: no land costs

large enough to accommodate 2 acre depot

cons: in a water conservancy district

location not optimal for routes

impact on school and neighbors

site preparation costs

replacement costs

Potential Sites

Other Option?

W R Grace land *

*not a possibility until/unless purchased by Town

pros: no residential neighbors

large enough to accommodate 2 acre depot

cons: location not optimal for routes

site preparation costs

environmental issues

Next Steps

- Incorporate what we learn this evening into our work.
- Finalize research.
- Prepare next Public Hearing presentation.
- Write a report with recommendations.
- Present to the School Committee on October 2nd.

Citizen School Transportation Committee

Schedule

Committee Meetings

August 30, 7-9:30pm Harvey Wheeler Center

Two additional meetings in September, to be scheduled

Public Hearing

September 13, 7-9:00pm, Concord Town House

Presentation to School Committee

October 2, 6:30pm, CCHS Library

Citizen School Transportation Committee

Thank you!

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Citizen Comments

We welcome your comments on our work as shared in this presentation. As a reminder, the areas of research presented are:

- Safety
- Social Factors and Intangibles
- Level of Service
- Cost Analysis
- Potential Sites