

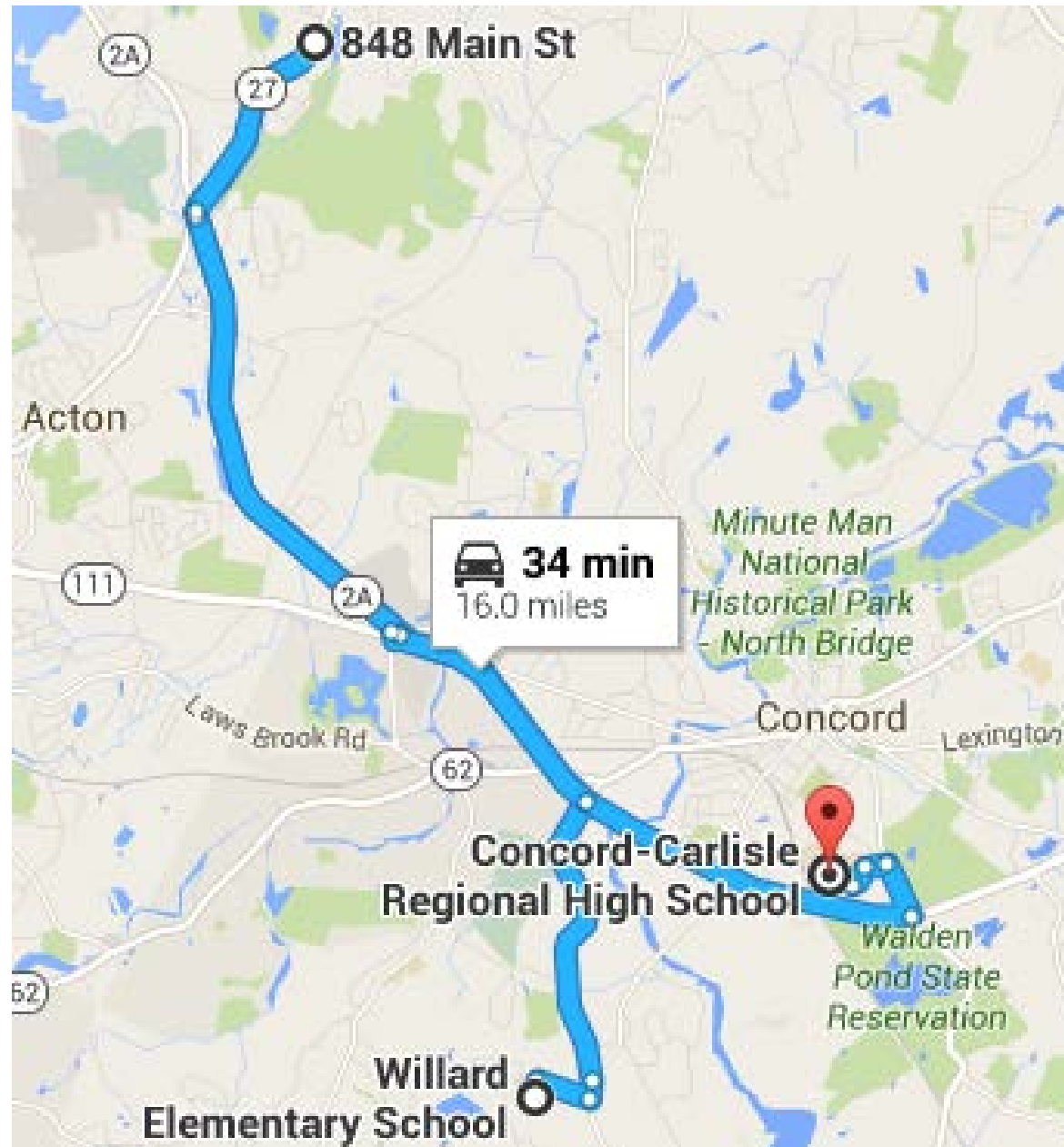
Article 16: Reconsidering the School Bus Terminal Location

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Financial Committee Hearing 2/1/2016

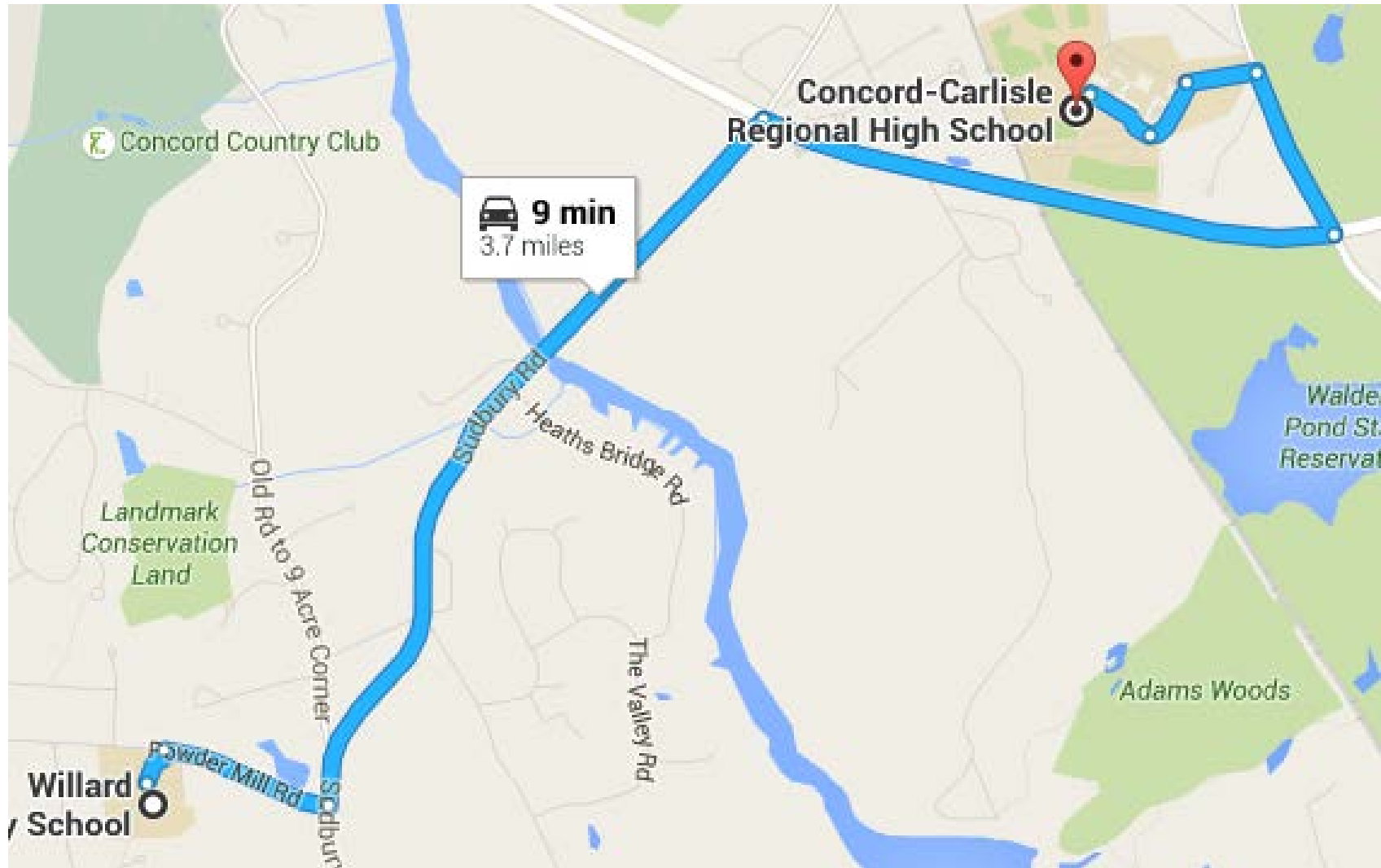
Empty Bus (EB) Miles

- Buses are empty driving to/from their depot.
- Buses return to the terminal between AM and PM routes.
- Support Knox terminal funding. Knox is a big improvement over Acton.
- Terminal near CCHS would further reduce EB miles.

Sample 1: Willard to Acton to CCHS



Sample 3: Willard to near CCHS to CCHS



Model Predicted Fuel Use and Cost

Depot Location/Comparison	near CCHS	Knox	Acton
Empty Bus (EB) Depot miles/yr	95,414	150,973	199,210
EB Diesel gallons/yr	15,902	25,162	33,202
EB gallons vs. near CCHS	0	9,260	17,299
EB Driver hours/yr vs. near CCHS	0	2,222	4,152
EB Operating Cost*/yr vs. near CCHS	\$0	\$171,403	\$320,215
40-year EB cost vs. near CCHS	\$0	\$6,856,104	\$12,808,604

*Driver cost plus benefits, bus depreciation (\$0.75/mile), fuel (\$4/gallon), maintenance (\$0.50/mile)

Total Diesel Gallons Purchased (model validation)

School Year	2010-11	2011-12	2012-13	2013-14	2014-15
Depot Location	CCHS	CCHS	Acton	Acton	Acton
Tot. Diesel Gallons	77,094	72,733	100,848	86,717	89,055

Bus Terminal Location Affects Fuel Use and Cost

- Support Knox terminal funding. Knox is a big improvement over Acton.
- If feasible in the future, parking buses near CCHS would further reduce costs and emissions.
- Thanks for your consideration

Sustainable School Busing

- Minimizes Cost
- Maximizes Ridership
- Minimizes Environmental Degradation
- Strengthens Community



Louise Haldeman

In-House Busing Cost Analysis

Concord Public Schools + Concord Carlisle Regional School District	Baseline Costs (2012\$)	Projected Costs (2013\$)
Personnel Costs	1,136,730	1,162,306
METCO labor (reimbursable)	197,791	202,241
Less labor for other school vehicles	-43,217	-44,189
Total Personnel Costs	1,291,304	1,320,358
Fuel and other Materials Costs	348,884	359,351
METCO-supplied fuel and other materials	108,292	111,541
Bus replacements at 2.8/year	266,000	266,000
Less Materials for other school vehicles	-17,441	-17,964
Total Operating Costs	705,735	718,927
Field trips and Utility Costs	107,358	110,156
Employee Benefits	273,075	279,219
Total All Transportation	2,377,472	2,428,660

Level-of-Service

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	505	14	266	1.9	38.29

Bus Inspections

Type C and D bus inspection	% Out of Service	% Requiring Repair
Concord	1%	13%
First Student Fitchburg	8%	51%
First Student Sudbury	5%	61%

Tallied 1534 State School Bus Inspection Reports

