

# FEASIBILITY STUDY DANBURY BRANCH ELECTRIFICATION PROJECT

## Public Information Meetings



### NOTICE OF PUBLIC INFORMATION MEETINGS

You are invited to attend one of the following Public Information Meetings for the Danbury Branch Electrification Feasibility Study PROJECT

#### Dates, Times, and Places:

**Tues., September 30, 2003** **Thurs., October 2, 2003**  
**5:30 to 8:30 P.M.** **5:30 to 8:30 P.M.**  
**Ridgefield Community Center** **Norwalk City Hall,**  
**316 Main Street** **120 West Avenue**  
**Ridgefield, CT 06877** **Norwalk, CT 06851**



Each meeting will be an Open House, and no formal presentation will take place, allowing you to come anytime between 5:30 and 8:30 P.M. Graphic boards presenting an overview of the study will be displayed for your review. Connecticut Department of Transportation (ConnDOT) and Washington Group representatives will be on hand to take your comments and answer your questions.

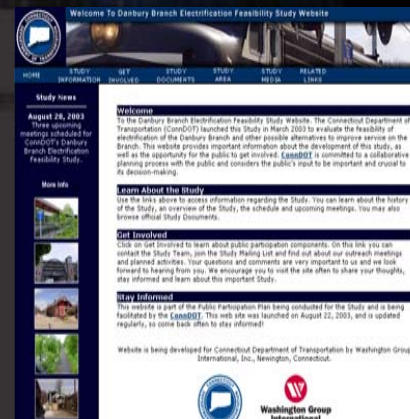
Persons unable to attend may provide comments to ConnDOT through Washington Group by mail: 30 Christian Lane, Newington, CT 06111, by fax: (860) 667-7002, or by e-mail: [steve.gazillo@wgint.com](mailto:steve.gazillo@wgint.com).

For more information, please call Steve Gazillo, Project Manager of Washington Group, at (860) 667-7622. Persons requiring assistive facilities should call by September 29th. You may also access information about the project from the study website at: <http://www.danburybranchstudy.com>.

**CONNECTICUT DEPARTMENT OF TRANSPORTATION**  
**JAMES F. BYRNES, JR., COMMISSIONER OF TRANSPORTATION**  
**JAMES A. ADAMS, DEPUTY COMMISSIONER OF TRANSPORTATION**  
**HTTP://WWW.DOT.STATE.CT.US**

## PROJECT UPDATE FOR THE NEW MILFORD RAIL SERVICE RESTORATION SOCIETY

OCTOBER 28, 2003



## STUDY TEAM

- **CONNECTICUT DEPARTMENT OF TRANSPORTATION**
  - RESPONSIBLE FOR STUDY; DIRECTS THE FOLLOWING TEAM:
- **WASHINGTON GROUP INTERNATIONAL (PRIME CONSULTANT)**
  - **SUBCONSULTANTS**
    - **GANNETT FLEMING TRANSIT & RAIL SYSTEMS**
    - **URBITRAN ASSOCIATES**
    - **MULTISYSTEMS**
    - **JAC PLANNING**
    - **PROJECT PLANNING AND ANALYSIS**



## STUDY PURPOSE & GOALS AND OBJECTIVES

- **STUDY PURPOSE**
  - EVALUATE A RANGE OF INFRASTRUCTURE AND SERVICE IMPROVEMENTS
  - DETERMINE POTENTIAL TO ENHANCE THE BRANCH'S ATTRACTION
  - ALTERNATIVE TO DRIVING ROUTE 7
  - ALTERNATIVE TO COMMUTING ON THE HARLEM LINE
- **GOALS AND OBJECTIVES**
  - INCREASE UTILITY OF THE BRANCH, ALLOWING FOR REDUCED TRAVEL TIME AND MORE FREQUENT SERVICE
  - EXPLORE FEASIBILITY OF PASSENGER SERVICE, DANBURY TO NEW MILFORD
  - HELP REDUCE AUTOMOBILE CONGESTION IN THE ROUTE 7 CORRIDOR AND OTHER ADJACENT NORTH/SOUTH CORRIDORS
  - IMPROVE ATTRACTIVENESS OF THE DANBURY BRANCH AS AN ALTERNATIVE TO THE HARLEM LINE IN NEW YORK STATE FOR CONNECTICUT RAIL COMMUTERS



## STUDY OUTLINE – FIVE TASKS

- DATA COLLECTION, REVIEW, PUBLIC OUTREACH
- EVALUATION OF ENGINEERING ALTERNATIVES
- RIDERSHIP FORECASTING
- EVALUATE THE IMPACT OF ELECTRIFICATION
- FINAL REPORT



# Danbury Branch Study - Phase I

## Project 302-008 - Work Schedule Revised

Prepared by Washington Group - September 18, 2003

Task or Activity	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03	Jan-04	Feb-04
Task 1 - Data Collection & Public Outreach Plan												
1.0 Review Previous Studies, Reports, Plans	[Red Bar]											
1.1 Review Existing Rail Schedules/Service Patterns		[Red Bar]										
1.3 Review Freight Service Sched./Service Patterns		[Red Bar]										
1.4 Review Transit Interface			[Red Bar]									
1.5 Review Existing Road Network			[Red Bar]									
1.6 Review Existing Rail Ridership		[Red Bar]										
1.7 Public Outreach Plan	[Red Bar]											
Advisory Committee Meetings				◆			◆		◆		◆	
Public Meetings							◆					◆
Purpose and Needs Report			[Red Bar]									
Study Web Page Placed on Line/Updated				◆	[Red Bar]							
				placed online			◆	open to public				
Task 2 - Evaluation of Engineering Alternatives												
2.1 Review Branch Line Rights of Way Boundaries	[Blue Bar]											
2.2 Evaluate Track geometry Improvements				[Blue Bar]								
2.3 evaluate Feasibility of Double Tracking				[Blue Bar]								
2.4 Evaluate Feasibility of Pasing Sidings Alternative					[Blue Bar]							
2.5 Evaluate Innovative Technologies						[Blue Bar]						
Prepare Draft Task 2 Report							[Blue Bar]					
Review and Comment Period								[Blue Bar]				
Prepare Final Task 2 Report									[Blue Bar]			
Task 3 - Ridership Forecasting												
Interface with DOT Forecasting Unit								[Green Bar]				
Ridership Forecast Model Runs by DOT							[Green Bar]					
Task 4 - Evaluate the Impact of Electrification												
Capital Cost Estimates									[Orange Bar]			
Effect of Electrification on Running Time								[Orange Bar]				
Prepare Draft Task 4 Report									[Orange Bar]			
Review and Comment										[Orange Bar]		
Prepare Final Task 4 Report											[Orange Bar]	
Task 5 - Phase I Final Report & Presentation												
Prepare Phase I Final Report											[Cyan Bar]	
Prepare Phase I Presentation											[Cyan Bar]	
Presentations to Public											[Cyan Bar]	[Cyan Bar]

## PROJECT MILESTONES

- **TASK ONE – DATA COLLECTION, PUBLIC OUTREACH PLAN (JUNE, 2003); PURPOSE AND NEEDS REPORT (SEPTEMBER, 2003)**
- **TASK TWO – EVALUATION OF ENGINEERING ALTERNATIVES (JANUARY, 2004)**
- **TASK THREE – RIDERSHIP FORECASTING (SPRING, 2004)**
- **TASK FOUR – EVALUATION OF IMPACTS OF ELECTRIFICATION (FEBRUARY, 2004)**
- **TASK FIVE – FINAL REPORT & PRESENTATION (SPRING, 2004)**



## PUBLIC OUTREACH

- **GOAL 1 - ESTABLISH EFFECTIVE COMMUNICATION WITH THE PUBLIC**
- **GOAL 2 - ENCOURAGE EARLY AND CONTINUING PUBLIC PARTICIPATION**
- **GOAL 3 - PRESENT COMPLETE INFORMATION TO THE PUBLIC**
- **GOAL 4 - DETERMINE PUBLIC SENTIMENT**



HTTP://WWW.DANBURYBRANCHSTUDY.COM



Welcome To Danbury Branch Electrification Feasibility Study Website



HOME

STUDY  
INFORMATION

GET  
INVOLVED

STUDY  
DOCUMENTS

STUDY  
AREA

STUDY  
MEDIA

RELATED  
LINKS

#### Study News

**August 28, 2003**

Three upcoming meetings scheduled for ConnDOT's Danbury Branch Electrification Feasibility Study.

#### More Info



#### Welcome

To the Danbury Branch Electrification Feasibility Study Website. The Connecticut Department of Transportation (ConnDOT) launched this Study in March 2003 to evaluate the feasibility of electrification of the Danbury Branch and other possible alternatives to improve service on the Branch. This website provides important information about the development of this study, as well as the opportunity for the public to get involved. [ConnDOT](#) is committed to a collaborative planning process with the public and considers the public's input to be important and crucial to its decision-making.

#### Learn About the Study

Use the links above to access information regarding the Study. You can learn about the history of the Study, an overview of the Study, the schedule and upcoming meetings. You may also browse official Study Documents.

#### Get Involved

Click on Get Involved to learn about public participation components. On this link you can contact the Study Team, join the Study Mailing List and find out about our outreach meetings and planned activities. Your questions and comments are very important to us and we look forward to hearing from you. We encourage you to visit the site often to share your thoughts, stay informed and learn about this important Study.

#### Stay Informed

This website is part of the Public Participation Plan being conducted for the Study and is being facilitated by the [ConnDOT](#). This web site was launched on August 22, 2003, and is updated regularly, so come back often to stay informed!

Website is being developed for Connecticut Department of Transportation by Washington Group International, Inc., Newington, Connecticut.





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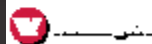


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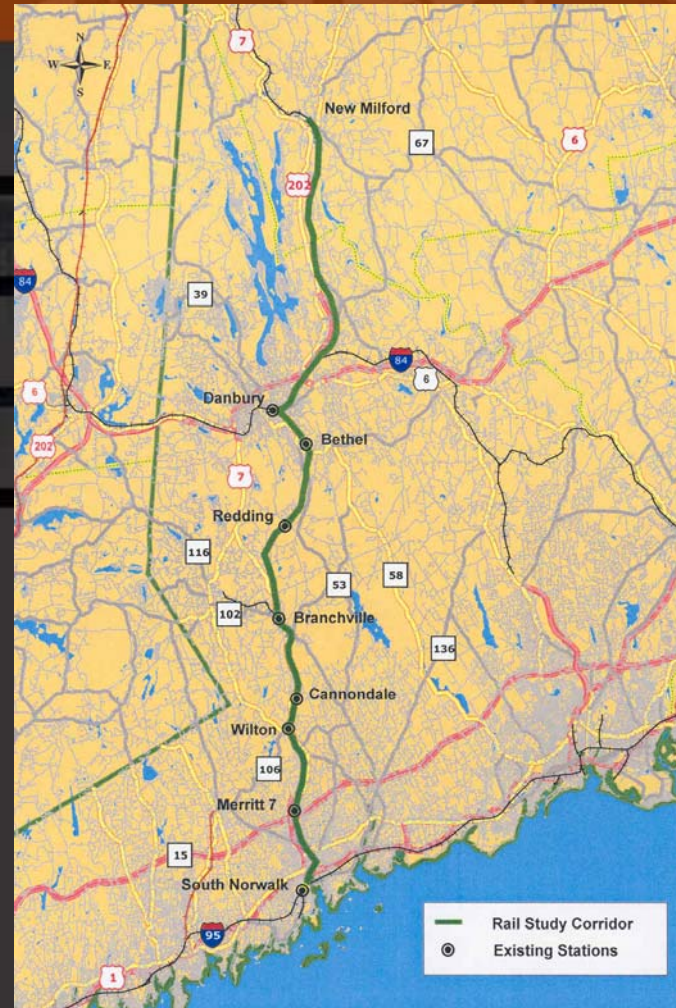
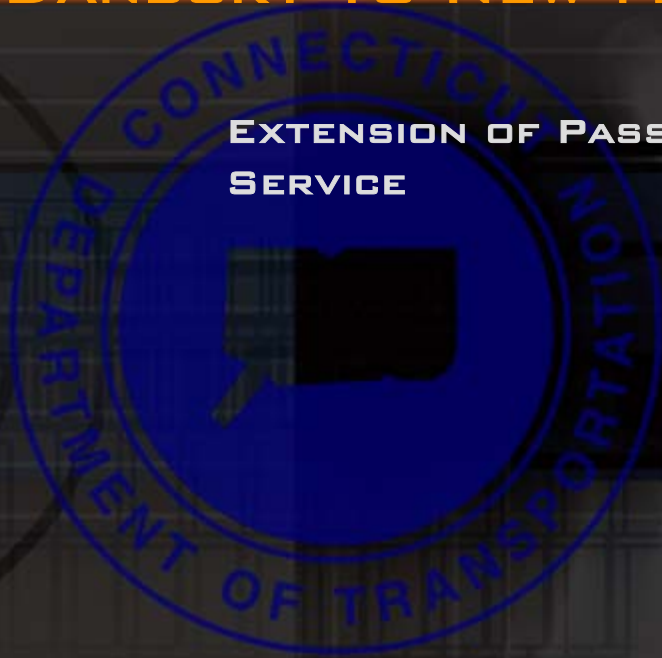
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# DANBURY TO NEW MILFORD

EXTENSION OF PASSENGER  
SERVICE



## DANBURY TO NEW MILFORD SECTION

- STUDY OF THIS SECTION RESULTING FROM TRANSPORTATION STRATEGY BOARD PRIORITY
- STUDY OF THIS SECTION FOLLOWS COMPLETION OF BRANCH LINE REVIEW IN TASK 2
- INVOLVES THOROUGH ON-SITE INVESTIGATION
- WILL INVOLVE DISCUSSIONS BETWEEN HOUSATONIC RAILROAD, CONNDOT, METRO-NORTH, HVCEO, STUDY TEAM AND LOCAL REPRESENTATIVES



## DANBURY TO NEW MILFORD SECTION

- **MAYBROOK LINE (DANBURY TO BERKSHIRE JUNCTION) – 2.9 MILES**
- **BERKSHIRE LINE (BERKSHIRE JUNCTION TO NEW MILFORD) – 11.5 MILES**
- **9 GRADE CROSSINGS**
- **7 OVERHEAD BRIDGES**
- **3 SIDINGS (NEW MILFORD STATION, KIMBERLY-CLARK, BERKSHIRE JUNCTION)**
- **ROW OWNED BY HOUSATONIC RAILROAD Co.**



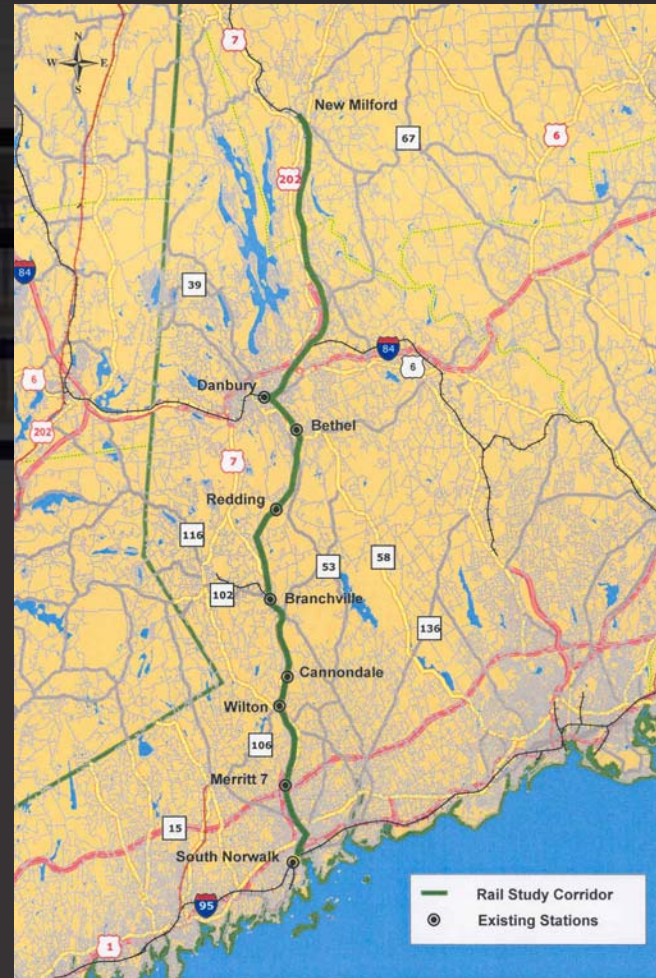
# DANBURY TO NEW MILFORD ISSUES IMPLEMENTING PASSENGER SERVICE ON EXISTING FREIGHT LINES

- **COMPENSATION**
- **LIABILITY INSURANCE**
- **GRADE CROSSING SAFETY**
- **SIGNALING AND TRAIN CONTROL REQUIREMENTS**
- **RIGHT-OF-WAY CAPACITY CONSTRAINTS**
- **MAINTAINING INTEGRITY OF FREIGHT SERVICE**
- **TRACK UPGRADE REQUIREMENTS**
- **FREIGHT CLEARANCES (ELECTRIFICATION)**



# OVERVIEW OF ENGINEERING TASK 2

## POTENTIAL IMPROVEMENT STRATEGIES



## POTENTIAL IMPROVEMENT STRATEGIES

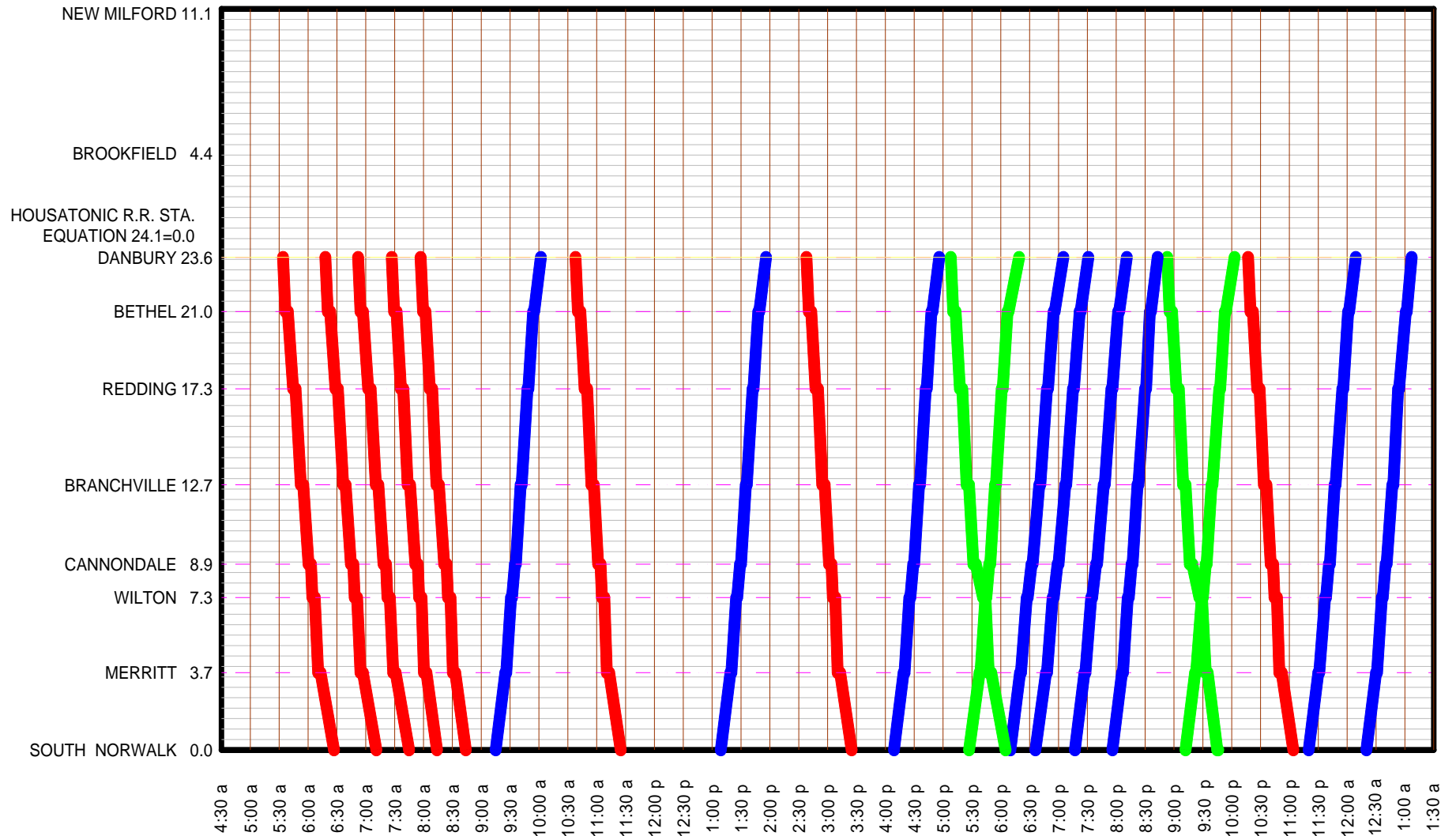
- TRACK GEOMETRY IMPROVEMENTS - CURVATURE, GRADES, SUPER ELEVATIONS, CLEARANCES, GRADE CROSSINGS
- POTENTIAL FOR DOUBLE TRACKING
- FEASIBILITY OF PASSING SIDINGS
- ELECTRIFICATION
- APPLICATION OF INNOVATIVE TECHNOLOGIES



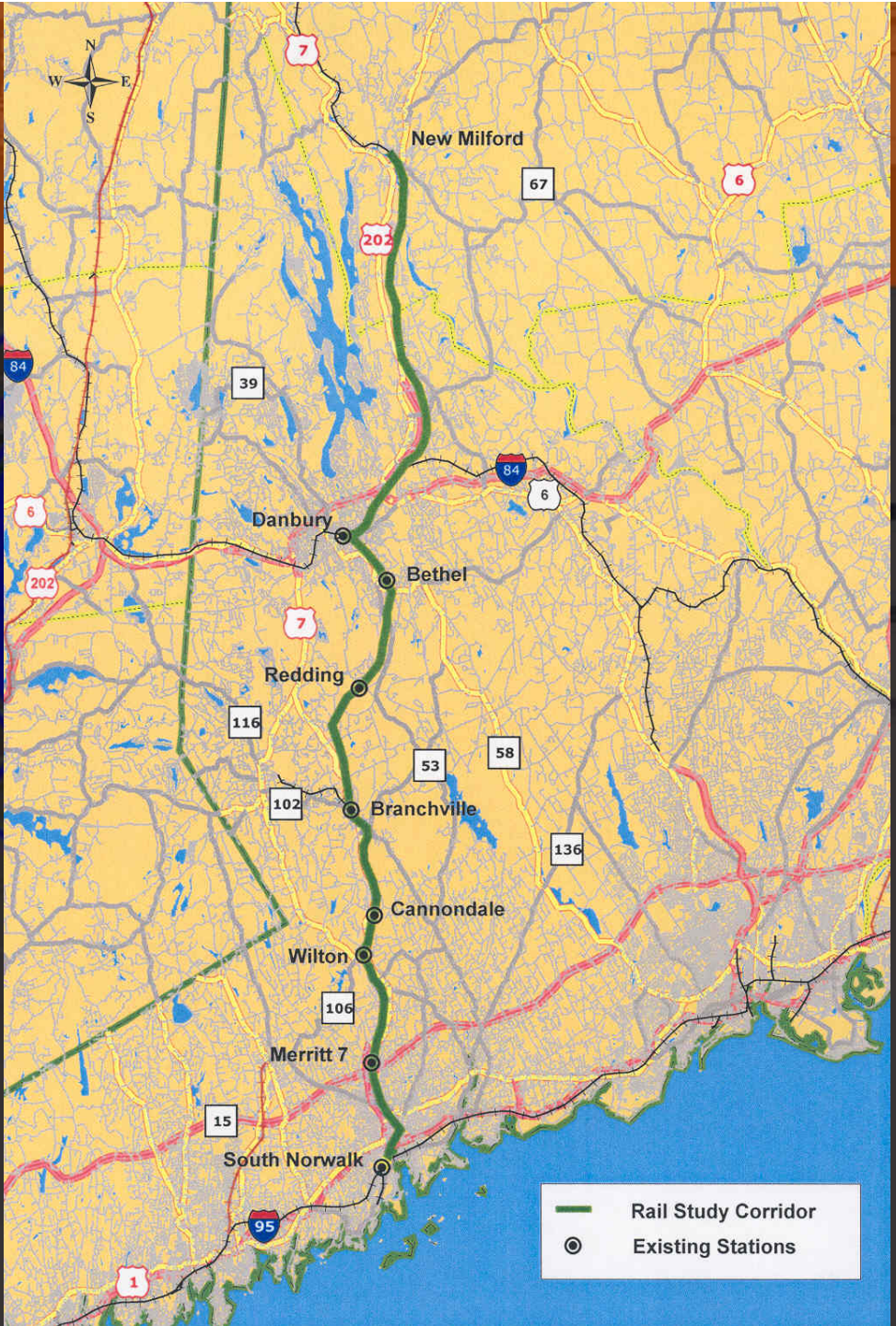
# DANBURY BRANCH

## CURRENT MNR WEEKDAY SCHEDULE

### SOUTH NORWALK TO DANBURY







EXISTING MAXIMUM  
ALLOWABLE SPEED  
RESTRICTIONS



PASSENGER  
STATIONS

S. NORWALK

MERRITT 7

WILTON

CANNONDALE

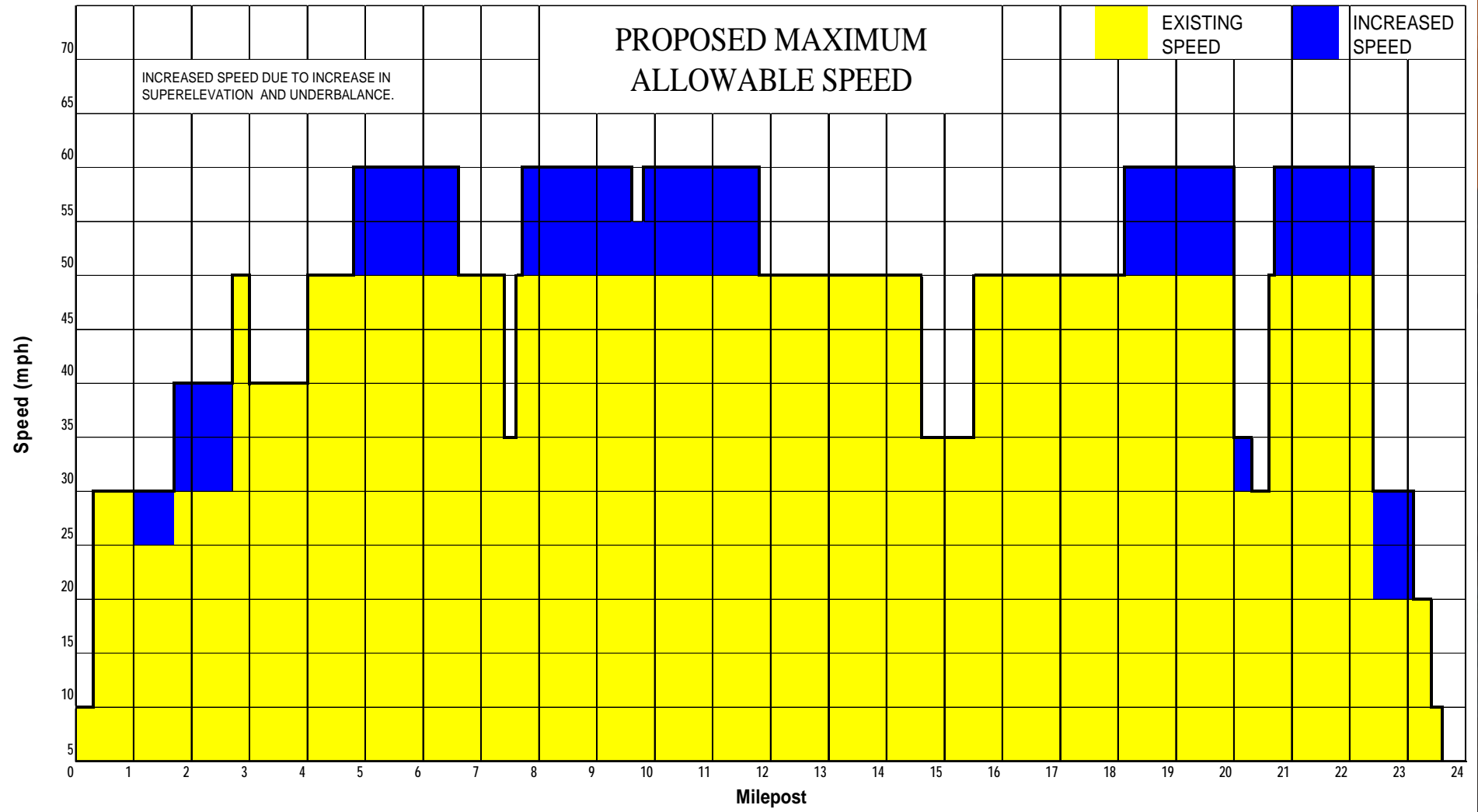
BRANCHVILLE

REDDING

BETHEL

DANBURY

South Norwalk to Danbury



PASSENGER STATIONS

S. NORWALK

MERRITT 7

WILTON

CANNONDALE

BRANCHVILLE

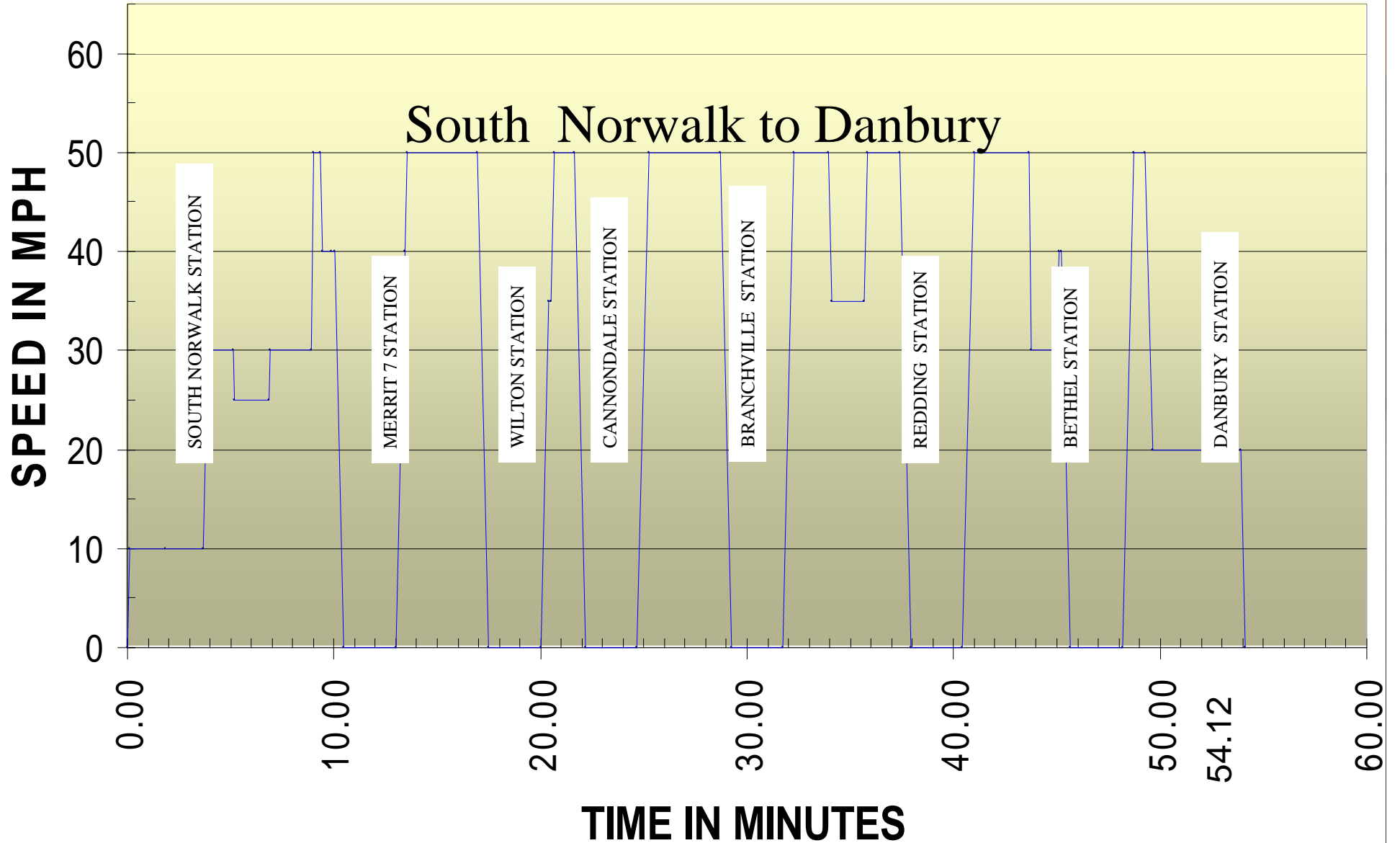
REDDING

BETHEL

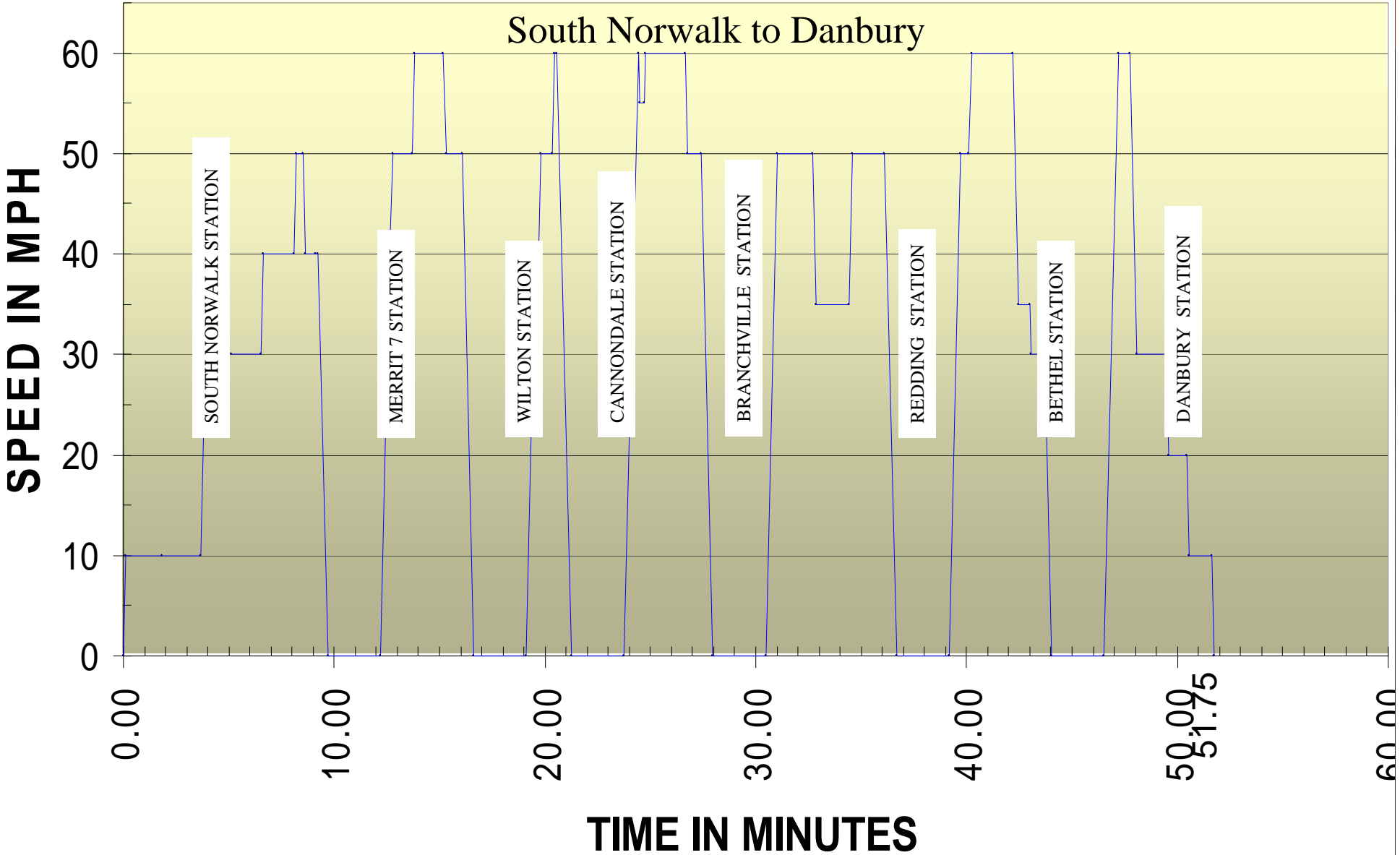
DANBURY

# South Norwalk to Danbury

# EXISTING SPEED VS. TIME CHART

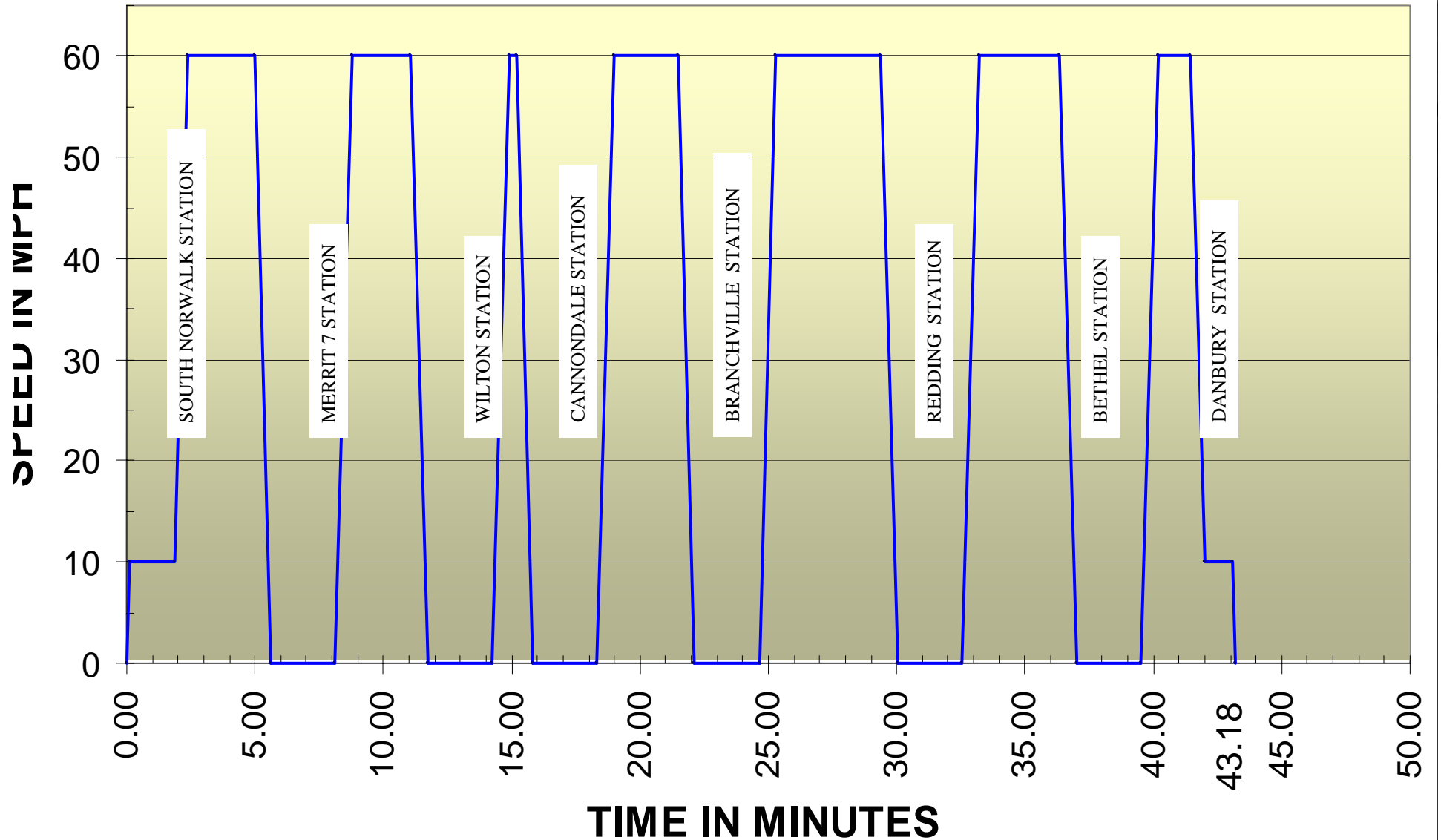


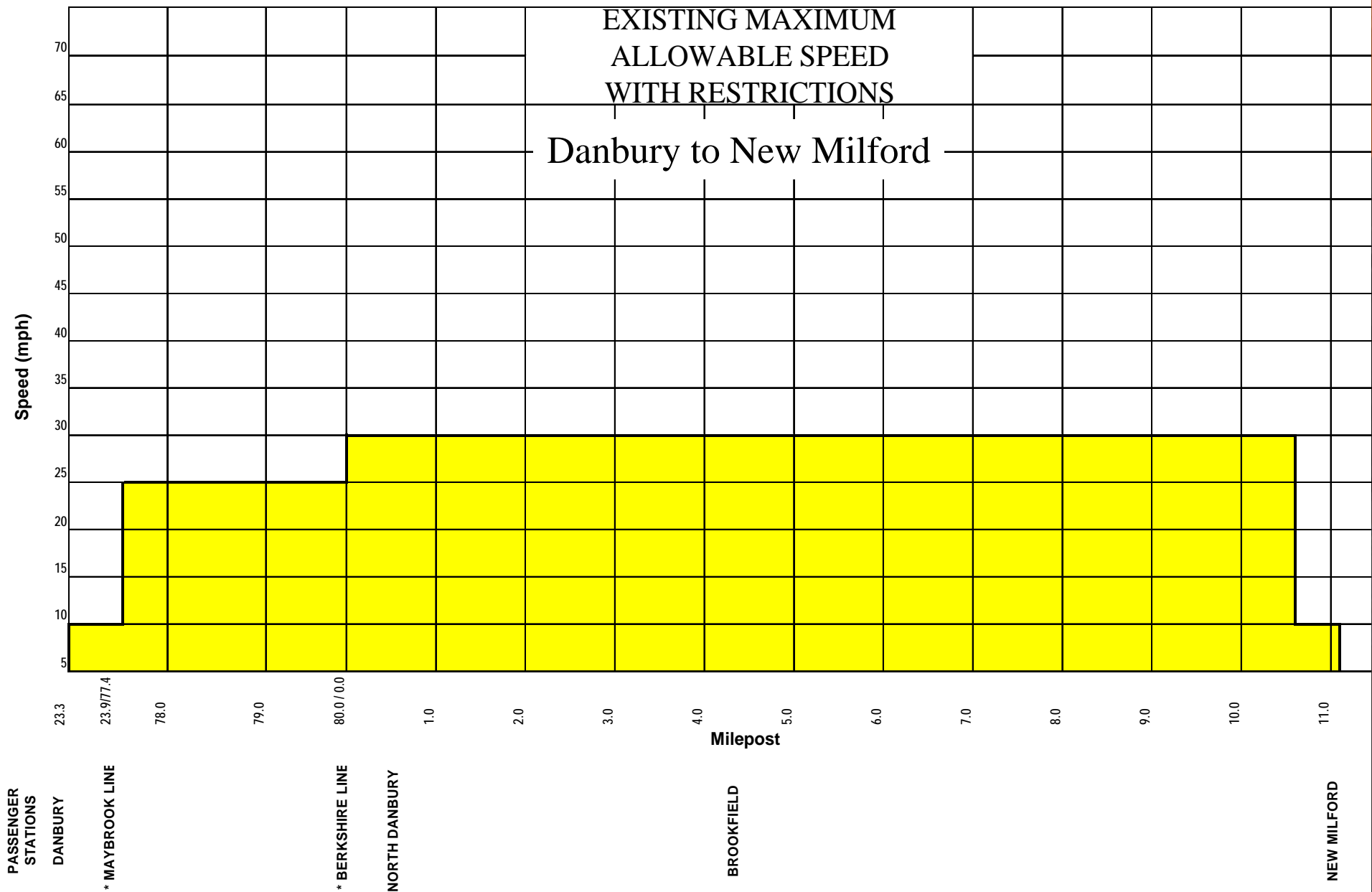
# INCREASED SPEED VS. TIME CHART



# UNRESTRICTED SPEED VS. TIME CHART

## South Norwalk to Danbury





\* NOTE: TRAINS WILL HAVE TO STOP TO MANUALLY OPERATE HAND-THROW SWITCHES

# ESTIMATED RUN TIMES VERSUS SPEED SOUTH NORWALK TO DANBURY

## CURRENT SCHEDULE

- **INBOUND: 47 MINUTES**
- **OUTBOUND: 47 – 54 MINUTES**

## BASELINE

- **50 MPH MAXIMUM ALLOWABLE SPEED WITH SPEED RESTRICTIONS**
- **45.78 MINUTES**

## INCREASED SUPERELEVATION

- **60 MPH MAXIMUM ALLOWABLE SPEED WITH SPEED RESTRICTIONS**
- **42.75 MINUTES**

## UN-RESTRICTED TIME

- **60 MPH MAXIMUM ALLOWABLE SPEED WITH SPEED RESTRICTIONS**
- **34.18 MINUTES**
- **RIGHT-OF-WAY ACQUISITION REQUIRED**

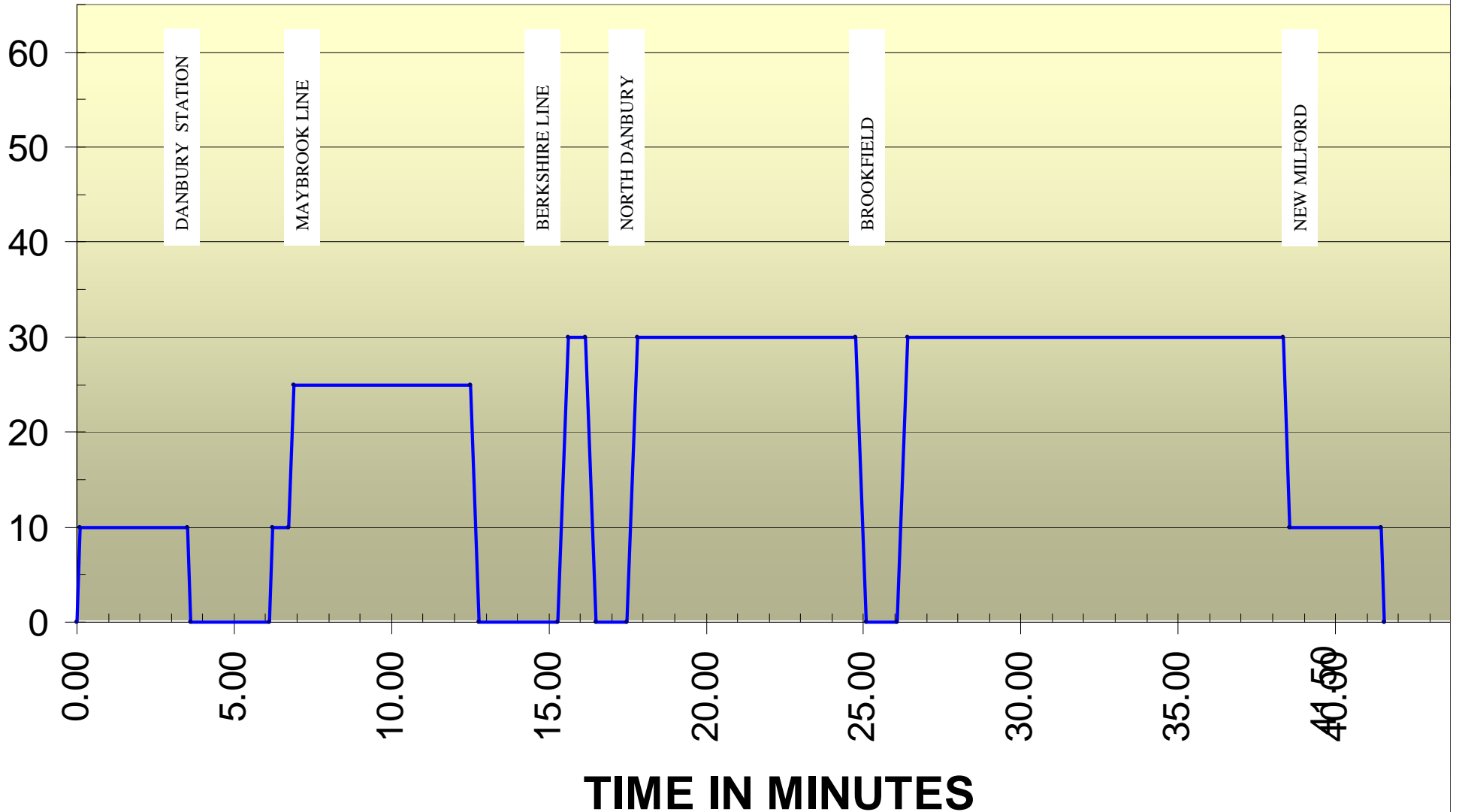
**DWELL TIMES @ STATIONS - 60 SECONDS**

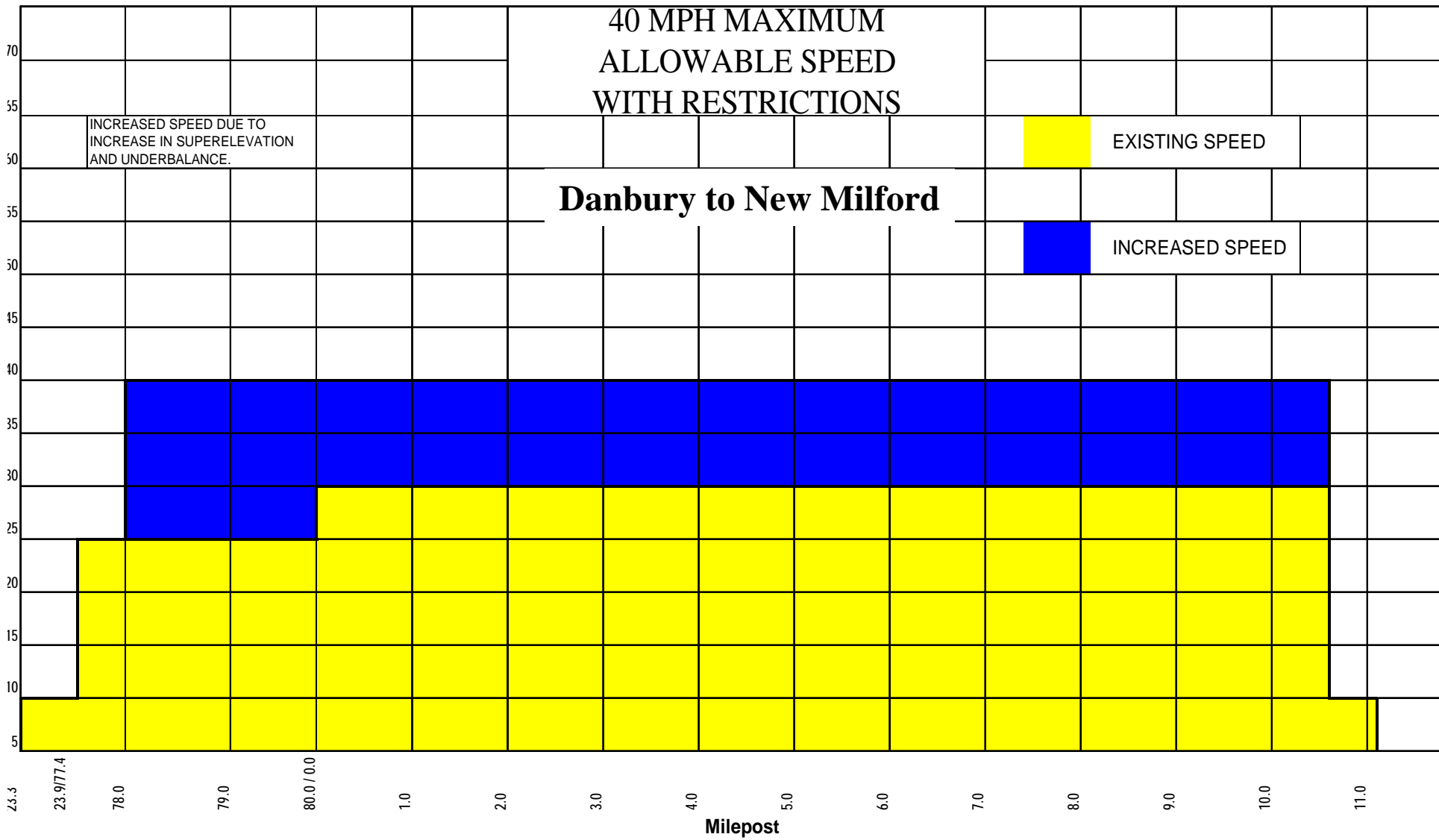




# EXISTING SPEED VS. TIME CHART

## Danbury to New Milford





**DANBURY**

**\* MAYBROOK LINE**

**\* BERKSHIRE LINE**

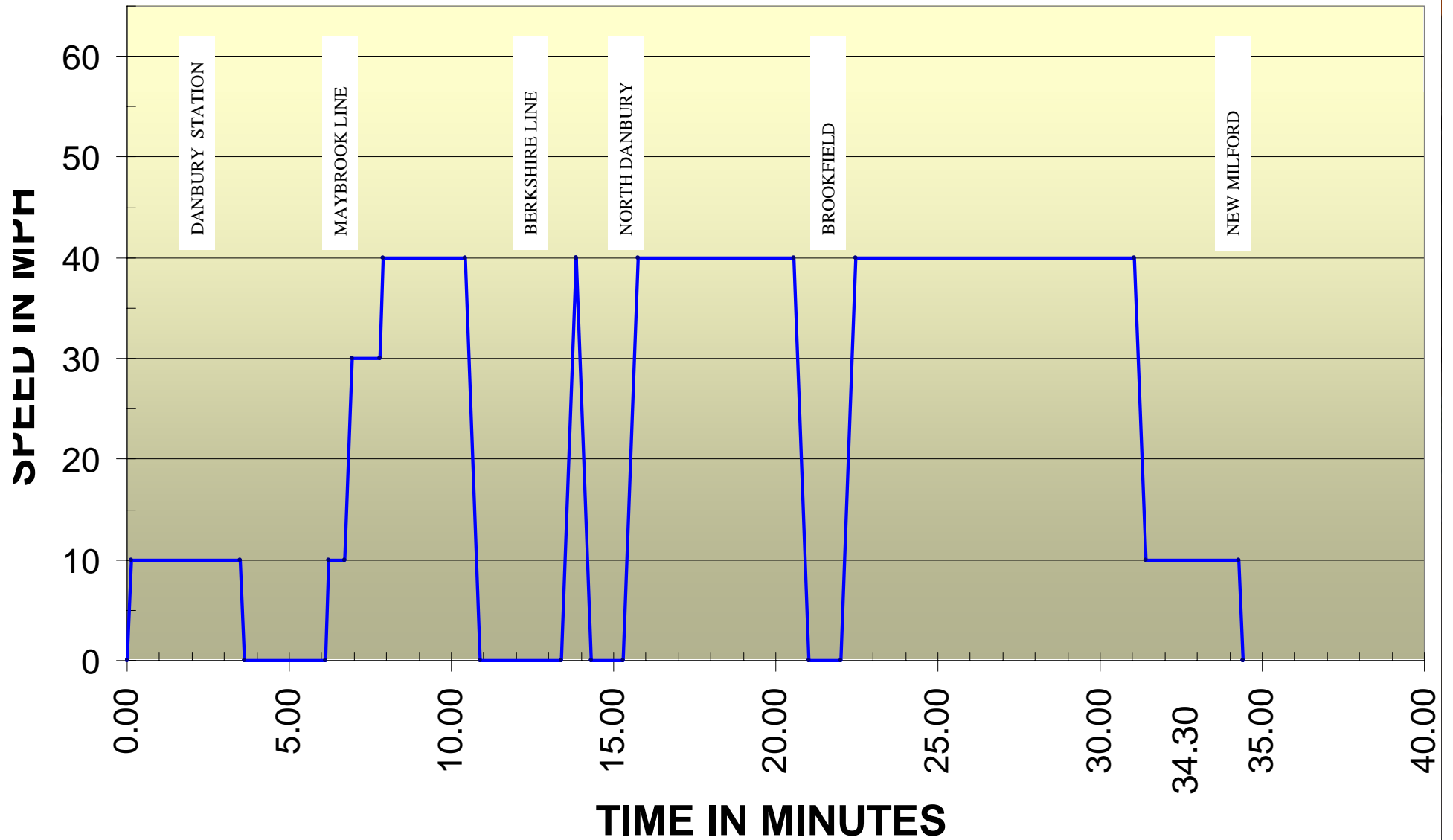
**NORTH DANBURY**

**BROOKFIELD**

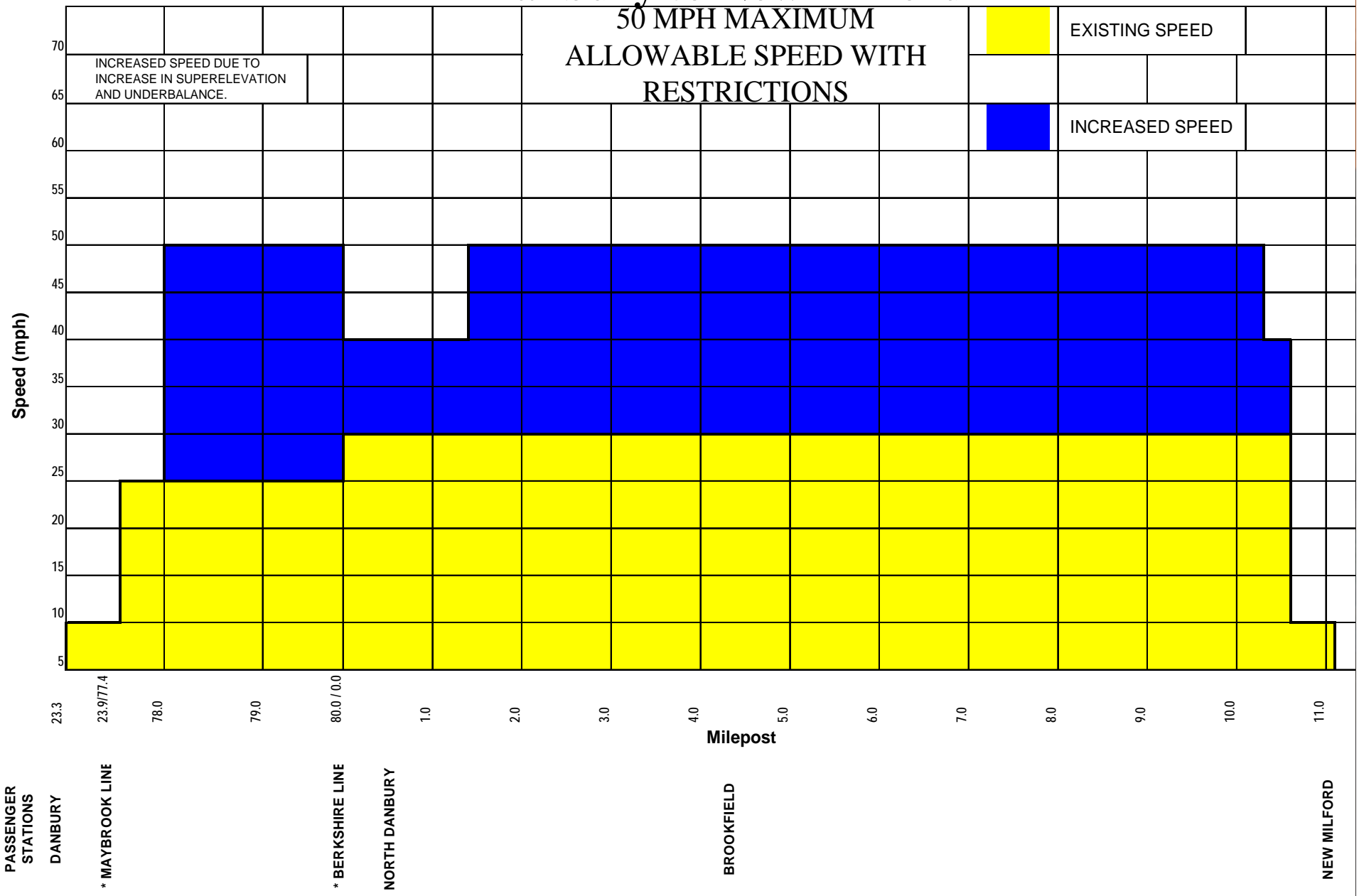
**NEW MILFORD**

\* NOTE: TRAINS WILL HAVE TO STOP TO MANUALLY OPERATE HAND-THROW SWITCHES

# INCREASE MAS TO 40 MPH VS. TIME CHART Danbury to New Milford



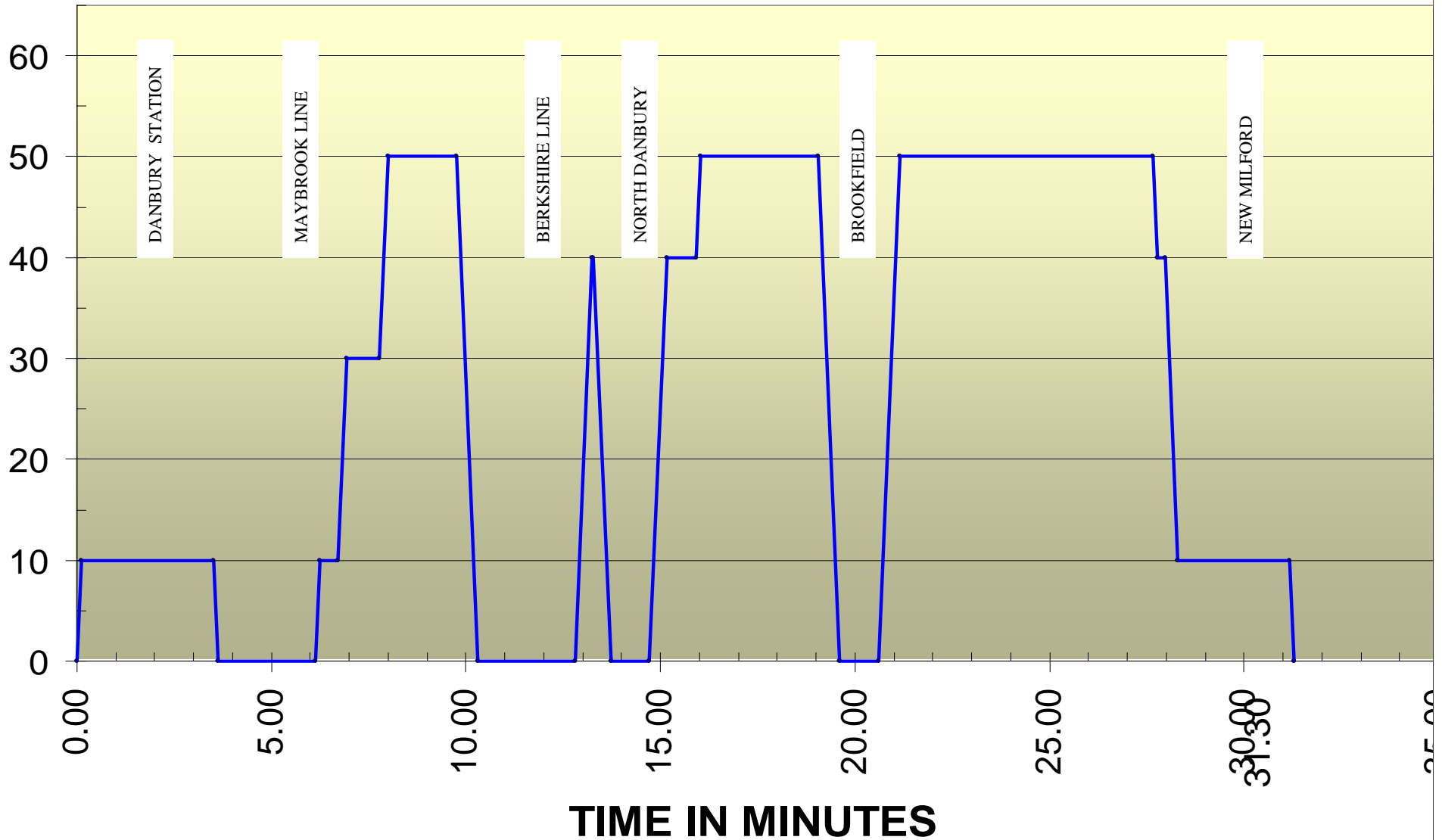
# Danbury to New Milford

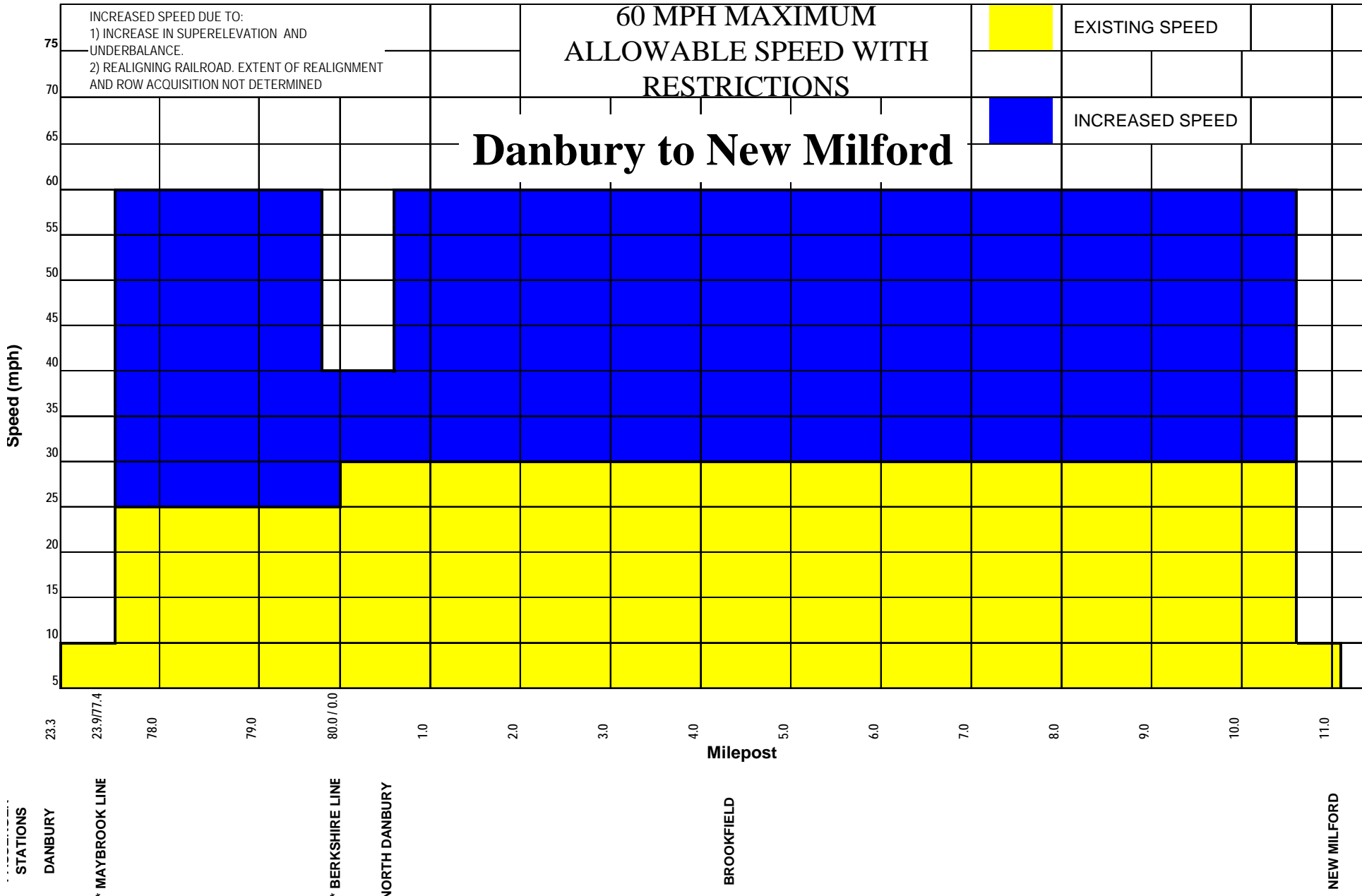


\* NOTE: TRAINS WILL HAVE TO STOP TO MANUALLY OPERATE HAND-THROW SWITCHES

# INCREASE MAS TO 50 MPH VS. TIME CHART

## Danbury to New Milford

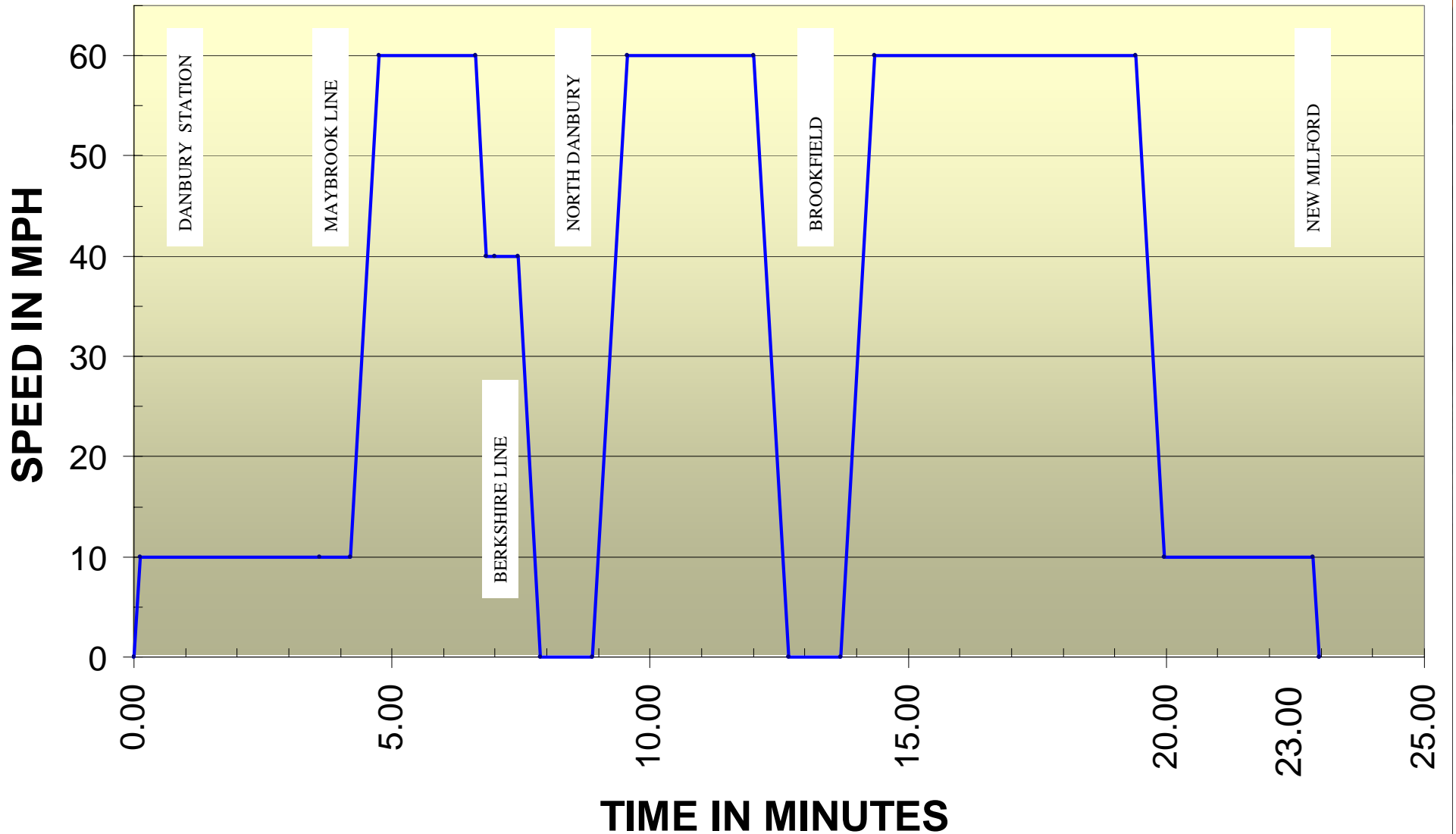




\* NOTE: THIS ALTERNATIVE ASSUMES REMOTE CONTROL, POWER-OPERATED SWITCHES. TRAINS WILL NOT HAVE TO STOP.

# INCREASE MAS TO 60 MPH VS. TIME CHART

## Danbury to New Milford



## ESTIMATED RUN TIMES VERSUS SPEED DANBURY TO NEW MILFORD

### ESTIMATED SCHEDULE

- EXISTING SPEEDS FROM HOUSATONIC RAILROAD TRACK CHARTS
- RUNTIME BASED ON MNR GENESIS LOCOMOTIVES
- DMU's CAN ACCELERATE FASTER, MAY REDUCE ANOTHER MINUTE OFF OF SCHEDULE

### BASELINE

- 30 MPH MAXIMUM ALLOWABLE SPEED WITH SPEED RESTRICTIONS
- 41.4 MINUTES
- ESTIMATED RUNTIMES INCLUDE 5 MINUTES TO OPERATE HAND-THROW SWITCHES IN DANBURY AND AT BERKSHIRE JUNCTION
- DWELL TIMES @ STATIONS - 60 SECONDS





## ESTIMATED RUN TIMES VERSUS SPEED DANBURY TO NEW MILFORD

### INCREASED SUPERELEVATION/UNDERBALANCE

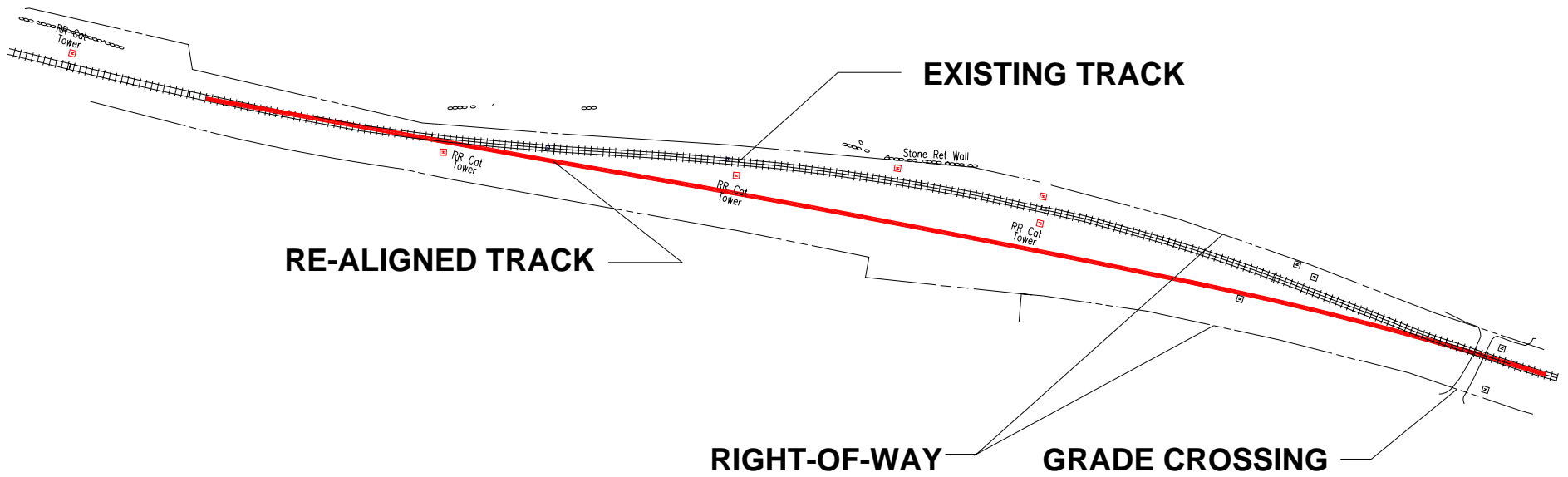
- 40 MPH MAXIMUM ALLOWABLE SPEED WITH SPEED RESTRICTIONS
- 34.3 MINUTES
- 50 MPH MAXIMUM ALLOWABLE SPEED WITH SPEED RESTRICTIONS
- 31.3 MINUTES
- ESTIMATED RUNTIMES INCLUDE 5 MINUTES TO OPERATE HAND-THROW SWITCHES IN DANBURY AND AT BERKSHIRE JUNCTION

### UN-RESTRICTED SPEED

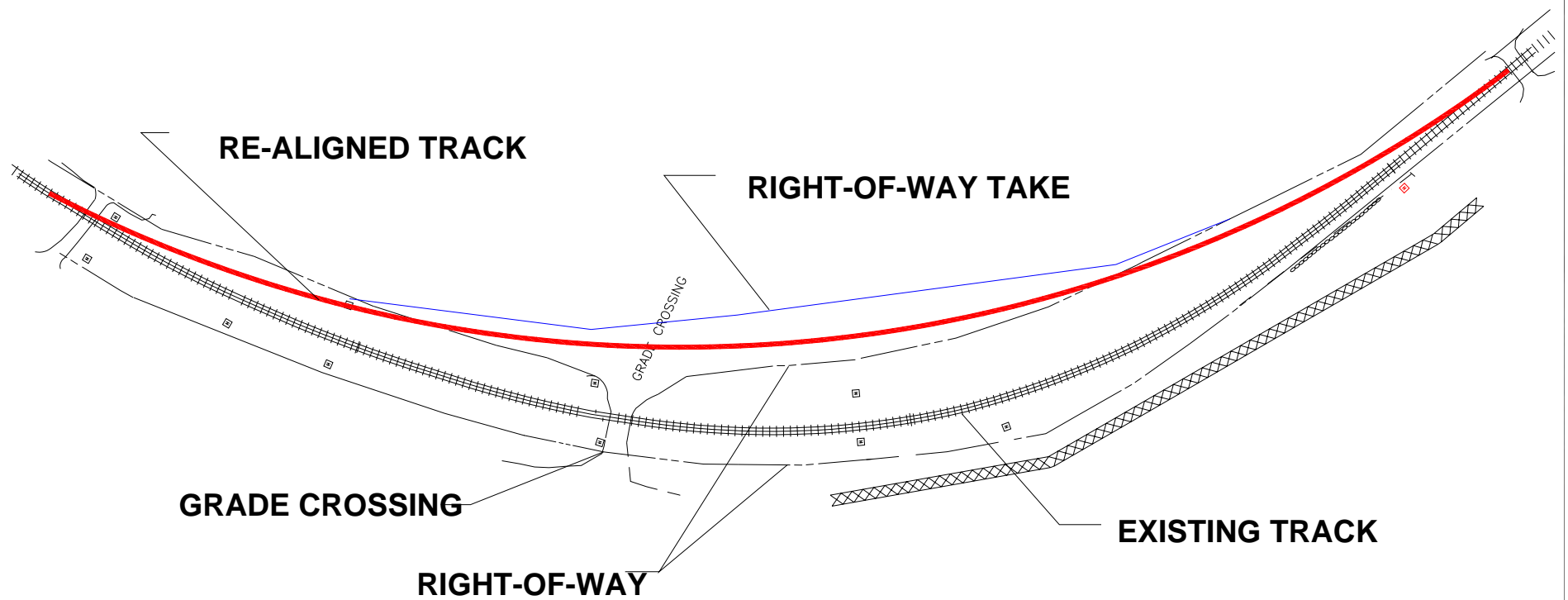
- 60 MPH MAXIMUM ALLOWABLE SPEED WITHOUT SPEED RESTRICTIONS
- 23.0 MINUTES
- RIGHT-OF-WAY ACQUISITION REQUIRED
- WAYSIDE SIGNAL SYSTEM WITH POWER OPERATED SWITCHES REQUIRED
- DWELL TIMES @ STATIONS - 60 SECONDS



# CURVE RE-ALIGNMENT TO INCREASE SPEED



# CURVE RE-ALIGNMENT TO INCREASE SPEED



**THANK YOU FOR COMING!**

**QUESTIONS???**