AREMA
AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION

# CHAPTER 18

# LIGHT DENSITY AND SHORT LINE RAILWAYS[1]

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[1] The material in this and other chapters in the AREMA ***Manual for Railway Engineering*** is published as recommended practice to railroads and others concerned with the engineering, design and construction of railroad fixed properties (except signals and communications), and allied services and facilities. For the purpose of this Manual, RECOMMENDED PRACTICE is defined as a material, device, design, plan, specification, principle or practice recommended to the railways for use as required, either exactly as presented or with such modifications as may be necessary or desirable to meet the needs of individual railways, but in either event, with a view to promoting efficiency and economy in the location, construction, operation or maintenance of railways. It is not intended to imply that other practices may not be equally acceptable.

## SCOPE

The material in this chapter is supplementary guidance for railroad lines categorized as light density or short lines. While these categories have no exact limits, for engineering purposes they are generally defined as follows:

## LIGHT DENSITY

A railroad line carrying less than 5 million gross tons of traffic per year. (Note: 1 million gross tons approximately equals the passage of 7,600 loaded 100-ton cars, or an average of 21 of these cars each day of the year.)

## SHORT LINE

A railroad not large enough to economically justify the use of large scale production maintenance techniques or to have fully staffed engineering and maintenance-of-way departments. Maintenance-of-way staff is sized for routine maintenance activities and may not perform this work full time. Engineering and design work, and perhaps much of the track and structure maintenance, are typically done by contract.

## INTRODUCTION

The Chapters of the AREMA Manual are divided into numbered Parts, each comprised of related documents (specifications, recommended practices, plans, etc.). Individual Parts are divided into Sections by centered headings set in capital letters and identified by a Section number. These Sections are subdivided into Articles designated by numbered side headings.

**Page Numbers** – In the page numbering of the Manual (18-2-1, for example) the first numeral designates the Chapter number, the second denotes the Part number in the Chapter, and the third numeral designates the page number in the Part. Thus, 18-2-1 means Chapter 18, Part 2, page 1.

In the Glossary and References, the Part number is replaced by either a “G” for Glossary or “R” for References.

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