

Starting Soon

2021 State Assessed Property Spring Forum



Working together to fund the future for all of Minnesota | www.revenue.state.mn.us

2021 State Assessed Property Spring Forum

Holly Soderbeck | Revenue Tax Specialist, Principal

March 11, 2021



Working together to fund the future for all of Minnesota | www.revenue.state.mn.us

Disclaimer

This presentation is for educational purposes only and does not provide tax advice. It is meant to accompany an oral presentation and not to be used as a standalone document.

This presentation is based on the facts and circumstances being discussed, and on the laws in effect when it is presented. It does not supersede or alter any provisions of Minnesota laws, administrative rules, court cases, or revenue notices.

If you have any questions, contact us at sa.property@state.mn.us or 651-556-6119, or consult a tax professional.

Agenda

- Draft capitalization study
- Opportunity for public comments

Minnesota Department of Revenue

Working together to fund the future for all of Minnesota

INDIVIDUALS	BUSINESSES	TAX PROFESSIONALS	GOVERNMENTS
-------------	------------	-------------------	-------------

Top Tasks

- [Where's My Refund?](#)
- [Make a Payment](#)
- [Log in to e-Services](#)
- [Register for a Tax ID](#)
- [Calculate a Sales Tax Rate](#)
- [Find a Form](#)



COVID-19 Penalty Relief

You may ask us to cancel or reduce filing or payment penalties if you have a reasonable cause or are negatively affected by the COVID-19 pandemic. For more information, [see Our Response to COVID-19](#).



Tax Law Update

FEATURED VIDEO



SEARCH CONTENT

cap rate

Refine search [+]

Search

Reset Search

Keyword Results

Capitalization Rate Study

The Minnesota Department of Revenue assesses utility, pipeline, and railroad operating property.

Last Updated: April 24, 2020

<https://www.revenue.state.mn.us/capitalization-rate-study>

Search Results 357 results

Capitalization Rate Study

The Minnesota Department of Revenue assesses utility, pipeline, and railroad operating property.

Last Updated: April 24, 2020



Capitalization Rate Study

MENU

The Minnesota Department of Revenue assesses utility, pipeline, and railroad operating property. We measure the present value of anticipated future benefits of property ownership to determine unitary valuations of State Assessed Property in Minnesota.

How does the department complete the study? [\[+\]](#)

How can I view the study? [\[-\]](#)

[2021 Draft Capitalization Rate Study](#)

Questions?

If you have questions, email us at sa.property@state.mn.us or call 651-556-6091.

Contact Info

EMAIL

Contact form

PHONE

651-556-3097
651-556-5128 (fax)

HOURS [\[+\]](#)

ADDRESS [\[+\]](#)

Last Updated

April 24, 2020



Capitalization Rate Study and Methodologies

Introduction

	Capital Structure	×	Market Rate	=	Weighted Rate
Debt	50%	×	6%	=	3%
Equity	50%	×	10%	=	5%
Combined Rate				=	8%

Beginning on page 1 of Draft Study

- S&P 500 Index – record highs at end of 2020
 - Gain of 16.3%
- Yield on 30-year Treasury securities
 - 2.33% on January 2, 2020
 - 1.66% on January 4, 2021

$$\text{Value} = \frac{\text{Net Operating Income or Net Railway Operating Income}}{\text{Yield Rate}}$$

Beginning on page 10 of Draft Study

Guideline Company Selection

Considerations:

- Value Line industries
- Standard industrial classification codes
- Location
- Business segments
- Recent or current mergers/acquisitions
- Recent initial public offering

Beginning on page 11 of Draft Study

Market Rate of Equity

Capital Asset Pricing Model:

Rate of Equity = (Equity Risk Premium x Beta) + Risk-Free Rate

Beginning on page 12 of Draft Study

Equity Risk Premium Estimates:

- Ex post
- Supply side
- Duff & Phelps recommended
- Three-stage ex ante
- Dr. Damodaran
- Duke CFO Global Business Outlook Survey
- Fernandez, Apellaniz, and Acin
- BVR Arithmetic
- BVR Geometric

Beginning on page 16 of Draft Study

Yield Rate

CAPM Data Inputs	2021 AY	Percent Change
Risk-Free Rate	1.66%	-28.8%
Ex Post (D&P)	7.25%	1.4%
BVR - Historical, Arithmetic	5.90%	-0.2%

Market Rate of Equity

Dividend Growth Model:

Rate of Equity = Dividend Yield + Growth Estimate

Beginning on page 21 of Draft Study

Market Rate of Equity

Two-Stage Dividend Growth Model:

Rate of Equity =

(Dividend Yield x (1 + 0.5 x Avg Growth Rate))

+ 0.67 x Short-term Growth Rate

+ 0.33 x Long-term Growth Rate

Beginning on page 23 of Draft Study

Market Rate of Debt

Yield to Maturity

Beginning on page 25 of Draft Study

Market Rate of Preferred Stock

Equity Component

$$\text{Indicated Equity Component} = \frac{1}{\text{Price to Earnings Ratio}}$$

Other

- Flotation costs
- Company-specific risk
- Illiquidity

Beginning on page 28 of Draft Study

Growth

- Short-term growth
- Long-term growth
- Inflation

Beginning on page 30 of Draft Study

Comments Welcome

Email comments to sa.property@state.mn.us by March 31.

Sent your comments by chat.

Beginning on page 34 of Draft Study

Looking Forward to the 2022 Study

- Yield on 20-Year Treasury security
- Duff & Phelps equity risk premium estimates
- Growth rate in three-stage dividend growth models
- Raw or adjusted beta
- Short-term debt

Beginning on page 34 of Draft Study

- Railroad market segment

Beginning on page 3 of Draft Study

- Three-stage dividend growth model

Beginning on page 3 of Draft Study

- Business Valuation Resources – Cost of Capital Platform

Beginning on page 3 of Draft Study

- Indicated rate of equity

Beginning on page 3 of Draft Study

Appendices

- Appendix A – Electric
- Appendix B – Gas Distribution
- Appendix C – Gas Transmission Pipeline
- Appendix D – Fluid Transportation Pipeline
- Appendix E – Railroads
- Appendix F – Ex Ante Calculations
- Appendix G – Guideline Company Selection

Data

Electric

Electric	2021 AY	Percent Change
Yield rate	6.17%	-4%
Debt in capital structure	35%	3%
Equity in capital structure	65%	-2%
Cost of equity	7.79%	1%
Cost of debt	3.17%	-16%
Beta	0.86	41%
Single-stage dividend growth model	8.50%	2%
Two-stage dividend growth model	8.01%	3%
Dividend yield	3.45%	15%
Short-term earnings growth est.	5.50%	-5%

Gas Distribution

Gas Distribution	2021 AY	Percent Change
Yield rate	6.43%	-9%
Debt in capital structure	38.00%	12%
Equity in capital structure	62.00%	-3%
Cost of equity	8.28%	-5%
Cost of debt	3.42%	-13%
Beta	0.87	34%
Single-stage dividend growth model	9.50%	-6%
Two-stage dividend growth model	8.86%	3%
Dividend yield	3.30%	16%
Short-term earnings growth	6.50%	-10%

Gas Transmission Pipeline

Gas Transmission	2021 AY	Percent Change
Yield rate	9.61%	-21%
Debt in capital structure	48.00%	23%
Equity in capital structure	52.00%	-15%
Cost of equity	14.63%	-15%
Cost of debt	4.16%	4%
Beta	1.27	-6%
Single-stage dividend growth model	20.43%	-11%
Two-stage dividend growth model	18.02%	-5%
Dividend yield	8.20%	39%
Short-term earnings growth est.	12.00%	-29%

Fluid Transportation Pipeline

Fluid Transportation	2021 AY	Percent Change
Yield rate	9.55%	-12%
Debt in capital structure	54.00%	42%
Equity in capital structure	46.00%	-26%
Cost of equity	15.07%	3%
Cost of debt	4.86%	1%
Beta	1.18	1%
Single-stage dividend growth model	21.50%	21%
Two-stage dividend growth model	19.94%	21%
Dividend yield	13.20%	53%
Short-term earnings growth est.	8.00%	-16%

Railroad

Railroad	2021 AY	Percent Change
Yield rate	8.74%	-21%
Debt in capital structure	15.00%	-12%
Equity in capital structure	85.00%	2%
Cost of equity	9.80%	-23%
Cost of debt	2.70%	-22%
Beta	1.1	-4%
Single-stage dividend growth model	11.75%	-19%
Two-stage dividend growth model	9.65%	-15%
Dividend yield	1.40%	-13%
Short-term earnings growth est.	10.50%	-21%



Questions?

sa.property@state.mn.us

Public Comments

Thank You!

Holly Soderbeck

sa.property@state.mn.us

651-556-6119

March 11, 2021