

**PRIVATE & CONFIDENTIAL**

August 3, 2023

BTS Rail Mass Transit Growth Infrastructure Fund  
175 Sathorn City Tower, 7<sup>th</sup>, 21<sup>st</sup> and 26<sup>th</sup> Floor,  
South Sathorn Road, Sathorn, Bangkok 10120

Attention: Fund Manager

Dear Sirs:

Re: AATL File No. 2023/322  
Letter of the Fair Value Update

We refer to our appraisal report dated May 11, 2022 (AATL File No. 2022/199). We updated our value conclusion based on the following information:

1. Information prepared by Bangkok Mass Transit System Public Company Limited as follows:
  - Revised revenue and expense budget for FY2023/2024
  - Updated expenses and capital expenditure
  - Updated revenue and additional investment for Saphan Taksin (S6) station
2. Revenue forecast, prepared by Systra MVA (Thailand) Limited on May 6, 2022
3. Expense forecast, prepared by InfraAsia (Thailand) Limited on May 6, 2022
4. Revised revenue forecast for FY2024/2025, and
5. Revised discount rate.

Based on the updated information, we conclude that the fair value of the net farebox revenue that could be generated by Bangkok Mass Transit System Public Co., Ltd. is Baht 38,370,000,000 (Baht Thirty Eight Thousand Three Hundred and Seventy Million) appraised as of June 30, 2023.

Yours faithfully,

**AMERICAN APPRAISAL (THAILAND) LTD.**



**Rodolfo L. Vergara**  
**Managing Director**

Key Valuer Approved by the Office of the SEC  
Examiner and Qualified Senior Valuer - ๖๓.๐๒๒



**Chompoonuch Chatmahakulchai**  
**Manager - Financial Valuation**

Thai Valuers Association Member  
No. 02-1-0814-63

Appraised By: Wanpen Thongwattana

# BTS Rail Mass Transit Growth Infrastructure Fund

## Cash Flow Projection

Valuation date:30/06/2023

(Unit: Million Baht)		FY2023/24 7/23-3/24	FY2024/25 4/24-3/25	FY2025/26 4/25-3/26	FY2026/27 4/26-3/27	FY2027/28 4/27-3/28	FY2028/29 4/28-3/29	FY2029/30 4/29-11/29
<b>Effective Fare (EF)</b>		34.58	34.63	35.81	35.86	37.45	37.26	38.96
<i>(growth)</i>			0.34%	3.40%	0.14%	4.42%	-0.49%	4.55%
<b>Daily Weekday Ridership (thousand pax/day) --by MVA</b>		772	778	819	883	929	951	975
<i>(growth)</i>			9%	5%	8%	5%	2%	3%
Ridership Annualization Factor (days)		248	330	330	330	330	330	224
<b>Annual Ridership (Million trips)</b>		<b>191.25</b>	<b>256.78</b>	<b>270.53</b>	<b>291.59</b>	<b>306.93</b>	<b>314.06</b>	<b>218.79</b>
<i>(growth)</i>			9%	5%	8%	5%	2%	-30%
Fare Box Revenue		6,613	8,893	9,688	10,457	11,494	11,703	8,524
<i>(growth)</i>			9%	9%	8%	10%	2%	-27%
<b>Total Revenues</b>		<b>6,613</b>	<b>8,893</b>	<b>9,688</b>	<b>10,457</b>	<b>11,494</b>	<b>11,703</b>	<b>8,524</b>
Siemens Maintenance Contract			385	394	403	412	421	235
Overhaul & Refurbishment(for Rolling stocks)			265	207	246	217	183	9
P&C Maintenance cost (Outsourced and InHouse)			145	146	149	152	156	108
<b>Total Repair and Maintenance Expenses</b>		<b>781</b>	<b>795</b>	<b>747</b>	<b>797</b>	<b>781</b>	<b>759</b>	<b>351</b>
Staff Costs		450	669	704	723	765	801	576
Utilities Expenses		355	403	429	453	466	478	332
Other Direct Operating Costs		300	481	606	693	783	851	657
Point Costs		269	410	527	607	694	758	592
Indirect Operating Costs		155	181	185	189	194	198	137
<b>Operating Expenses</b>		<b>1,261</b>	<b>1,734</b>	<b>1,924</b>	<b>2,059</b>	<b>2,207</b>	<b>2,328</b>	<b>1,702</b>
<b>Total Expenses</b>		<b>2,042</b>	<b>2,529</b>	<b>2,670</b>	<b>2,856</b>	<b>2,988</b>	<b>3,087</b>	<b>2,053</b>
<b>EBITDA</b>		<b>4,572</b>	<b>6,365</b>	<b>7,018</b>	<b>7,601</b>	<b>8,506</b>	<b>8,616</b>	<b>6,471</b>
Less: Capital Expenditures - Others		60	147	164	147	183	172	104
Additional Investment - S6 Station			60	215	125	-	-	-
<b>Free Cash Flow</b>		<b>4,511</b>	<b>6,158</b>	<b>6,639</b>	<b>7,329</b>	<b>8,323</b>	<b>8,444</b>	<b>6,367</b>
Adjustment Factor for the Year		1	1	1	1	1	1	1
Adjusted Free Cash Flow		4,511	6,158	6,639	7,329	8,323	8,444	6,367
Discount Period		0.38	1.25	2.25	3.25	4.25	5.25	6.09
Discount Factor		0.976	0.922	0.864	0.810	0.759	0.711	0.674
<b>Present Value as at 30/06/2023</b>		<b>4,403</b>	<b>5,678</b>	<b>5,738</b>	<b>5,936</b>	<b>6,318</b>	<b>6,007</b>	<b>4,289</b>

<b>Discount Rate</b>	<b>6.70%</b>
<b>Net Present Value (Million Baht)</b>	<b>38,371</b>
<b>Rounded to (Million Baht)</b>	<b>38,370</b>

## BTS Rail Mass Transit Growth Infrastructure Fund

### Calculation of Weighted Average Cost of Capital ("WACC")

Valuation as of June 30, 2023

#### Singapore Cost of Equity

Guideline Company	Published Levered Beta (a)	Book Value Interest-Bearing Debt (b) (SGD Millions*)	Liquidation Value Preferred Stock (b) (SGD Millions*)	Stock Price per Share (b) (SGD*)	Common Shares Outstanding (b) (SGD Millions)	Market Value of Common Equity (c) (SGD Millions*)	Total Invested Capital ("TIC") (d) (SGD Millions*)	Debt to TIC (e)	Equity to TIC (f)
ComfortDelgro Corporation (CMDG.SI)	1.01	351.0	0.0	1.16	2,166.11	2,512.7	2,863.7	12%	88%
AVERAGE	1.01	351.0	0.0	1.16	2166.11	2,512.7	2,863.7	12%	88%
MEDIAN	1.01	351.0	0.0	1.16	2166.11	2,512.7	2,863.7	12%	88%

\* Data is presented in millions of SG dollars for all guideline publicly traded companies unless noted otherwise.

#### Concluded Variables

Capital Structure for the Subject Company

Percent Debt 0%

Percent Equity 100%

Tax Rate for the Subject Company 0.0% (g)

Levered/Relevered Beta for the Subject Company 0.90

#### Computation of Unlevered Beta for Guideline Companies

$BU = BL / [1 + (1 - T) \times (Wd / We)]$

	<u>BU</u>	<u>Tax Rate</u>
ComfortDelgro Corporation (CMDG.SI)	0.90	17.0%
AVERAGE	0.90	
MEDIAN	0.90	

#### Computation of Relevered Beta for Subject Company

$BL = BU \times [1 + (1 - T) \times (Wd / We)]$

Concluded Unlevered Beta	0.90
Relevered Beta for Subject Company	0.90

#### Definitions:

BU = Beta unlevered

BL = Beta levered

T = Income tax rate for the company

Wd = Percentage of debt capital in the capital structure; debt capital is comprised of interest-bearing debt and preferred stock

We = Percentage of equity capital in the capital structure; equity capital is comprised of the market value of common equity

#### Notes:

- (a) Five-year beta, if available, from Bloomberg
- (b) Data are based on information from Bloomberg
- (c) Market Value of Common Equity = Stock Price per Share x Common Shares Outstanding
- (d) Total Invested Capital ("TIC") = Book Value Interest-Bearing Debt + Liquidation Value Preferred Stock + Market Value of Common Equity
- (e) (Book Value Interest-Bearing Debt + Liquidation Value Preferred Stock) / TIC
- (f) Market Value of Common Equity / TIC
- (g) This is the estimated effective tax rate for the subject company.

## BTS Rail Mass Transit Growth Infrastructure Fund

### Calculation of Weighted Average Cost of Capital ("WACC") Valuation as of June 30, 2023

Cost of Equity			Source
Risk-Free Rate of Return (h)		2.41%	This is based on yield on 6.43-year Government Bond from Thai Bond Market Association.
Equity Risk Premium:			
Thailand Market Volatility	2.33		SET index volatility (Standard Deviation of Return on Market)
SG Market Volatility	<u>2.03</u>		STI index volatility (Standard Deviation of Return on Market)
Relative Volatility Adjustment Factor (2.33/ 2.03)		1.15	Thailand market volatility / SG market volatility
SG Equity Risk Premium		<u>5.00%</u>	
Equity Risk Premium (1.15 x 5.00%)		5.74%	Relative Volatility Adjustment Factor x SG Equity Risk Premium
Levered/Relevered Beta for the Subject Company		<u>0.90</u>	Relevered 5-year beta from Bloomberg
Concluded Equity Risk Premium (5.74% x 0.90)		5.18%	Equity Risk Premium x Levered/Relevered Beta for the Subject Company
Specific Company Risk Adjustment		<u>1.0%</u>	
Indicated Cost of Equity (2.41%+5.18% +1.0%)		8.60%	
<b>Concluded Cost of Equity</b>		<u><u>8.60%</u></u>	

Notes:

(h) This is based on yield on 6.43-year Government Bond from Thai Bond Market Association.

## BTS Rail Mass Transit Growth Infrastructure Fund

### Calculation of Weighted Average Cost of Capital ("WACC")

Valuation as of June 30, 2023

#### Hong Kong Cost of Equity

Guideline Company	Published Levered Beta (a)	Book Value Interest-Bearing Debt (b) (HKD Millions*)	Liquidation Value Preferred Stock (b) (HKD Millions*)	Stock Price per Share (b) (HKD*)	Common Shares Outstanding (b) (HKD Millions)	Market Value of Common Equity (c) (HKD Millions*)	Total Invested Capital ("TIC") (d) (HKD Millions*)	Debt to TIC (e)	Equity to TIC (f)
MTR Corporation Ltd. (0066.HK)	0.60	47,986.0	0.0	36.00	6,202.1	223,274.2	271,260.2	18%	82%
AVERAGE	0.60	47,986.0	0.0			223,274.2	271,260.2	18%	82%
MEDIAN	0.60	47,986.0	0.0			223,274.2	271,260.2	18%	82%

\* Data is presented in millions of HKD for all guideline publicly traded companies unless noted otherwise.

#### Concluded Variables

Capital Structure for the Subject Company

Percent Debt	0%
Percent Equity	100%
Tax Rate for the Subject Company	0.0% (g)
Levered/Relevered Beta for the Subject Company	0.51

#### Computation of Unlevered Beta for Guideline Companies

$$BU = BL / [1 + (1 - T) \times (Wd / We)]$$

	<u>BU</u>	<u>Tax Rate</u>
MTR Corporation Ltd. (0066.HK)	0.51	16.5%
AVERAGE	0.51	
MEDIAN	0.51	

#### Computation of Relevered Beta for Subject Company

$$BL = BU \times [1 + (1 - T) \times (Wd / We)]$$

Concluded Unlevered Beta	0.51
Relevered Beta for Subject Company	0.51

#### Definitions:

BU = Beta unlevered

BL = Beta levered

T = Income tax rate for the company

Wd = Percentage of debt capital in the capital structure; debt capital is comprised of interest-bearing debt and preferred stock

We = Percentage of equity capital in the capital structure; equity capital is comprised of the market value of common equity

#### Notes:

- (a) Five-year beta, if available, from Bloomberg
- (b) Data are based on information from Bloomberg
- (c) Market Value of Common Equity = Stock Price per Share x Common Shares Outstanding
- (d) Total Invested Capital ("TIC") = Book Value Interest-Bearing Debt + Liquidation Value Preferred Stock + Market Value of Common Equity
- (e) (Book Value Interest-Bearing Debt + Liquidation Value Preferred Stock) / TIC
- (f) Market Value of Common Equity / TIC
- (g) This is the estimated effective tax rate for the subject company.

## BTS Rail Mass Transit Growth Infrastructure Fund

### Calculation of Weighted Average Cost of Capital ("WACC") Valuation as of June 30, 2023

Cost of Equity		Source
Risk-Free Rate of Return (h)	2.41%	This is based on yield on 6.43-year Government Bond from Thai Bond Market Association.
Equity Risk Premium:		
Thailand Market Volatility	2.33	SET index volatility (Standard Deviation of Return on Market)
HK Market Volatility	3.16	HSI index volatility (Standard Deviation of Return on Market)
Relative Volatility Adjustment Factor (2.33/ 3.16)	0.74	Thailand market volatility / HK market volatility
HK Equity Risk Premium	5.91%	
Equity Risk Premium (0.74 x 5.91%)	4.4%	Relative Volatility Adjustment Factor x HK Equity Risk Premium
Levered/Relevered Beta for the Subject Company	0.51	Relevered 5-year beta from Bloomberg
Concluded Equity Risk Premium (4.4% x 0.51)	2.20%	Equity Risk Premium x Levered/Relevered Beta for the Subject Company
Specific Company Risk Adjustment	1.0%	
Indicated Cost of Equity (2.41% + 2.22%+1%)	5.62%	
<b>Concluded Cost of Equity</b>	<b>5.62%</b>	

Notes:

(h) This is based on yield on 6.43-year Government Bond from Thai Bond Market Association.

## BTS Rail Mass Transit Growth Infrastructure Fund

### Calculation of Weighted Average Cost of Capital ("WACC") Valuation as of March 31, 2023

#### Japan Cost of Equity

Guideline Company	Published Levered Beta (a)	Book Value Interest-Bearing Debt (b) (JPY Millions*)	Liquidation Value Preferred Stock (b) (JPY Millions*)	Stock Price per Share (b) (JPY*)	Common Shares Outstanding (b) (JPY Millions)	Market Value of Common Equity (c) (JPY Millions*)	Total Invested Capital ("TIC") (d) (JPY Millions*)	Debt to TIC (e)	Equity to TIC (f)
Tokyu Corporation (9005.T)	0.92	1,224,158.0	0.0	1,734.5	602.3	1,044,755.3	2,268,913.3	54%	46%
AVERAGE	0.92	1,224,158.0	0.0	1,734.5	602.3	1,044,755.3	2,268,913.3	54%	46%
MEDIAN	0.92	1,224,158.0	0.0	1,734.5	602.3	1,044,755.3	2,268,913.3	54%	46%

\* Data is presented in millions of JPY dollars for all guideline publicly traded companies unless noted otherwise.

#### Concluded Variables

Capital Structure for the Subject Company

Percent Debt	0%
Percent Equity	100%
Tax Rate for the Subject Company	0.0% (g)
Levered/Relevered Beta for the Subject Company	0.51

#### Computation of Unlevered Beta for Guideline Companies

$$BU = BL / [1 + (1 - T) \times (Wd / We)]$$

	<u>BU</u>	<u>Tax Rate</u>
Tokyu Corporation (9005.T)	0.51	30.62%
AVERAGE	0.51	
MEDIAN	0.51	

#### Computation of Relevered Beta for Subject Company

$$BL = BU \times [1 + (1 - T) \times (Wd / We)]$$

Concluded Unlevered Beta	0.51
Relevered Beta for Subject Company	0.51

#### Definitions:

BU = Beta unlevered

BL = Beta levered

T = Income tax rate for the company

Wd = Percentage of debt capital in the capital structure; debt capital is comprised of interest-bearing debt and preferred stock

We = Percentage of equity capital in the capital structure; equity capital is comprised of the market value of common equity

#### Notes:

- (a) Five-year beta, if available, from Bloomberg
- (b) Data are based on information from Bloomberg
- (c) Market Value of Common Equity = Stock Price per Share x Common Shares Outstanding
- (d) Total Invested Capital ("TIC") = Book Value Interest-Bearing Debt + Liquidation Value Preferred Stock + Market Value of Common Equity
- (e) (Book Value Interest-Bearing Debt + Liquidation Value Preferred Stock) / TIC
- (f) Market Value of Common Equity / TIC
- (g) This is the estimated effective tax rate for the subject company.

## BTS Rail Mass Transit Growth Infrastructure Fund

### Calculation of Weighted Average Cost of Capital ("WACC") Valuation as of March 31, 2023

Cost of Equity		Source
Risk-Free Rate of Return (h)	2.41%	This is based on yield on 6.43-year Government Bond from Thai Bond Market Association.
Equity Risk Premium:		
Thailand Market Volatility	2.33	SET index volatility (Standard Deviation of Return on Market)
JP Market Volatility	2.94	NKI index volatility (Standard Deviation of Return on Market)
Relative Volatility Adjustment Factor (2.33 / 2.94)	0.79	Thailand market volatility / JP market volatility
JP Equity Risk Premium	6.07%	
Equity Risk Premium (0.79 x 6.07%)	4.80%	Relative Volatility Adjustment Factor x JP Equity Risk Premium
Levered/Relevered Beta for the Subject Company	0.51	Relevered 5-year beta from Bloomberg
Concluded Equity Risk Premium (4.80% x 0.51)	2.45%	Equity Risk Premium x Levered/Relevered Beta for the Subject Company
Specific Company Risk Adjustment	1.0%	
Indicated Cost of Equity (2.41%+2.45% +1.0%)	5.86%	
<b>Concluded Cost of Equity</b>	<b>5.86%</b>	

Notes:

(h) This is based on yield on 6.43-year Government Bond from Thai Bond Market Association.



## BTS Rail Mass Transit Growth Infrastructure Fund

### Calculation of Weighted Average Cost of Capital ("WACC") Valuation as of June 30, 2023

#### Thailand Cost of Equity

Guideline Company	Published Levered Beta (a)	Book Value Interest-Bearing Debt (b) (Baht Millions*)	Liquidation Value Preferred Stock (b) (Baht Millions*)	Stock Price per Share (b) (Baht*)	Common Shares Outstanding (b) (Baht Millions)	Market Value of Common Equity (c) (Baht Millions*)	Total Invested Capital ("TIC") (d) (Baht Millions*)	Debt to TIC (e)	Equity to TIC (f)
BTS Group Holdings Public Co., Ltd. (BTSG)	1.01	155,532	0.0	7.45	13,167.6	98,098.6	253,630.8	61%	39%
AVERAGE	1.01	155,532	0.0	7.45	13,167.6	98,098.6	253,630.8	61%	39%
MEDIAN	1.01	155,532	0.0	7.45	13,167.6	98,098.6	253,630.8	61%	39%

\* Data is presented in millions of Baht for all guideline publicly traded companies unless noted otherwise.

#### Concluded Variables

Capital Structure for the Subject Company	
Percent Debt	0%
Percent Equity	100%
Tax Rate for the Subject Company	0.0% (g)
Levered/Relevered Beta for the Subject Company	0.45

#### Computation of Unlevered Beta for Guideline Companies

$$BU = BL / [1 + (1 - T) \times (Wd / We)]$$

	BU	Tax Rate
BTS Group Holdings Public Co., Ltd. (BTSG)	0.45	20.0%
AVERAGE	0.45	
MEDIAN	0.45	

#### Computation of Relevered Beta for Subject Company

$$BL = BU \times [1 + (1 - T) \times (Wd / We)]$$

Concluded Unlevered Beta	0.45
Relevered Beta for Subject Company	0.45

#### Definitions:

BU = Beta unlevered

BL = Beta levered

T = Income tax rate for the company

Wd = Percentage of debt capital in the capital structure; debt capital is comprised of interest-bearing debt and preferred stock

We = Percentage of equity capital in the capital structure; equity capital is comprised of the market value of common equity

#### Notes:

- Five-year beta, if available, from Bloomberg
- Data are based on information from Bloomberg
- Market Value of Common Equity = Stock Price per Share x Common Shares Outstanding
- Total Invested Capital ("TIC") = Book Value Interest-Bearing Debt + Liquidation Value Preferred Stock + Market Value of Common Equity
- (Book Value Interest-Bearing Debt + Liquidation Value Preferred Stock) / TIC
- Market Value of Common Equity / TIC
- This is the estimated effective tax rate for the subject company which reflects the combined effects of federal and state income tax payments.

#### Cost of Equity

##### Capital Asset Pricing Model

Risk-Free Rate of Return (h)	2.41%
Plus Equity Risk Premium	
Market Risk Premium	7.43%
Times Levered/Relevered Beta	0.45
Adjusted Market Risk Premium (7.43%x0.45)	3.31%
Plus Specific Company Risk Adjustment	1.0%
Indicated Cost of Equity (2.41%+3.31%+1.0%)	6.72%

#### Concluded Thailand Cost of Equity

6.72%

#### Cost of Debt

Concluded Pretax Cost of Debt	3.90% (i)
Income Tax Rate	0.00%
Concluded After-Tax Cost of Debt	3.90%

#### Notes:

(h) This is based on yield on 6.43-year Government Bond from Thai Bond Market Association.

(i) Average long-term Thai corporate bond rate for A rating from Thai Bond Market Association

**Calculation of Country Specific Weighted Average Cost of Capital ("WACC")**  
**Valuation as of June 30, 2023**