Presentation

Marine Terminal Lease Rate Determination Methods

Port Executive Management Seminar

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AAPA

SCT
SECRETARÍA DE COMUNICACIONES Y TRANSPORTES

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COORDINACIÓN GENERAL

Background

CH2M HILL assisted a port client in determining the fair market lease rate for a multipurpose / common-user terminal

- Lease to be negotiated for a 10 year timeframe
- Current lease revenues were below historical levels
- Client's observations indicated that the property and terminal were way under-valued
- Client anticipated that tenant would resist increases
- Client was seeking technical support for negotiations
  - What is a fair market lease rate?
  - Ongoing negotiation support

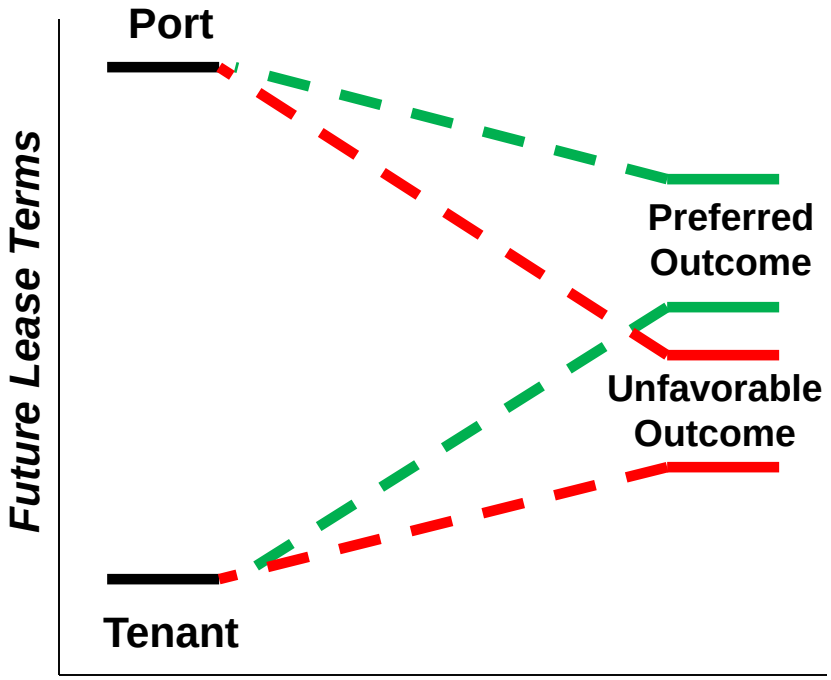
Key Facts

- Early 70's construction
- >100 Acres
- ~4,000-foot berth
- Competitive draft
- Containers
- Reefers
- Breakbulk
- RoRo
- On-dock warehousing
- On-dock rail

Negotiation Goals

Position client to negotiate a fair market lease that aligns with the terminal's valuation at an arms length transaction

Negotiation Goals

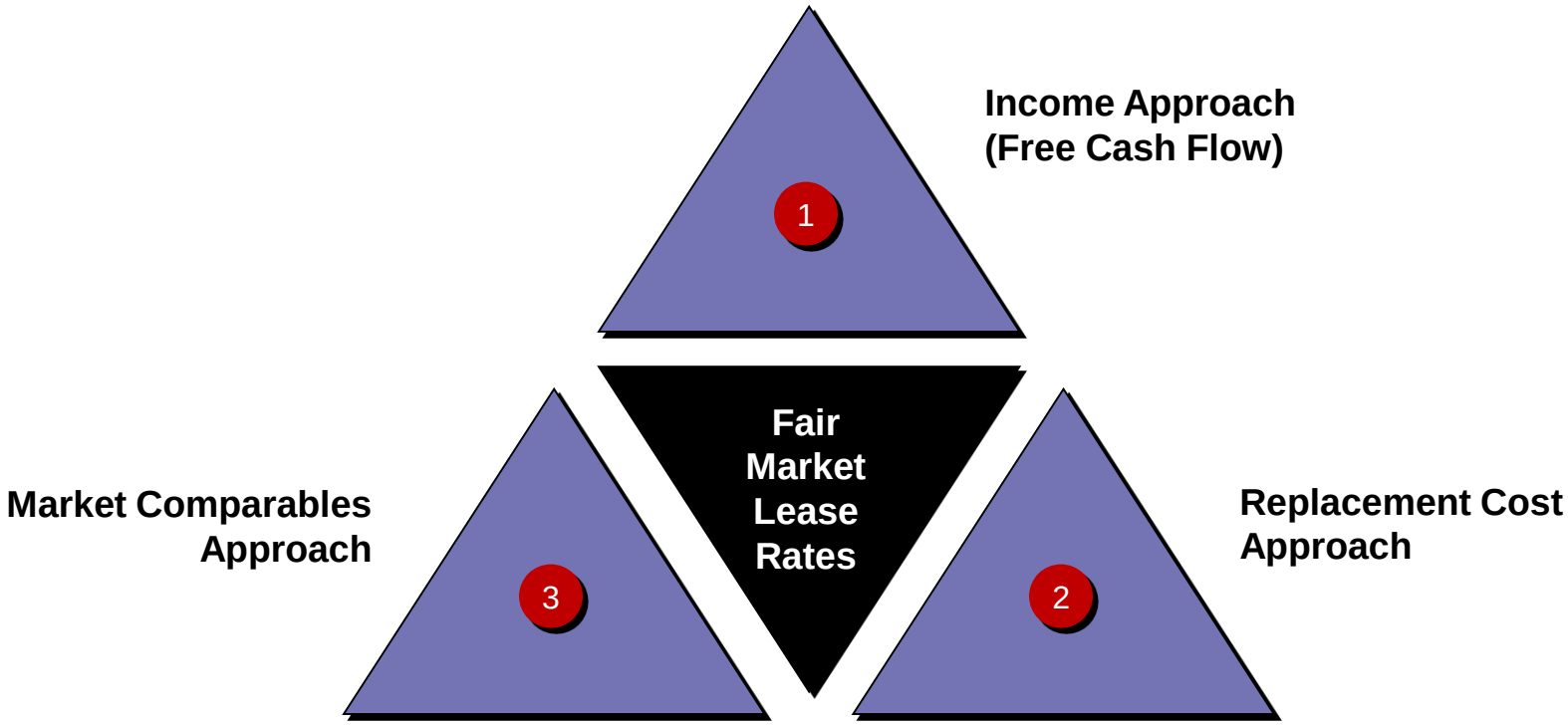


Key Success Factors

- Knowledge of facility operations and infrastructure in marketplace
- Utilize generally accepted practices
- Robust quantitative analysis
- Armed with data, and more data

Valuation Methods

Our approach utilized the three valuation methods of the Uniform Standards of Professional Appraisal Practice



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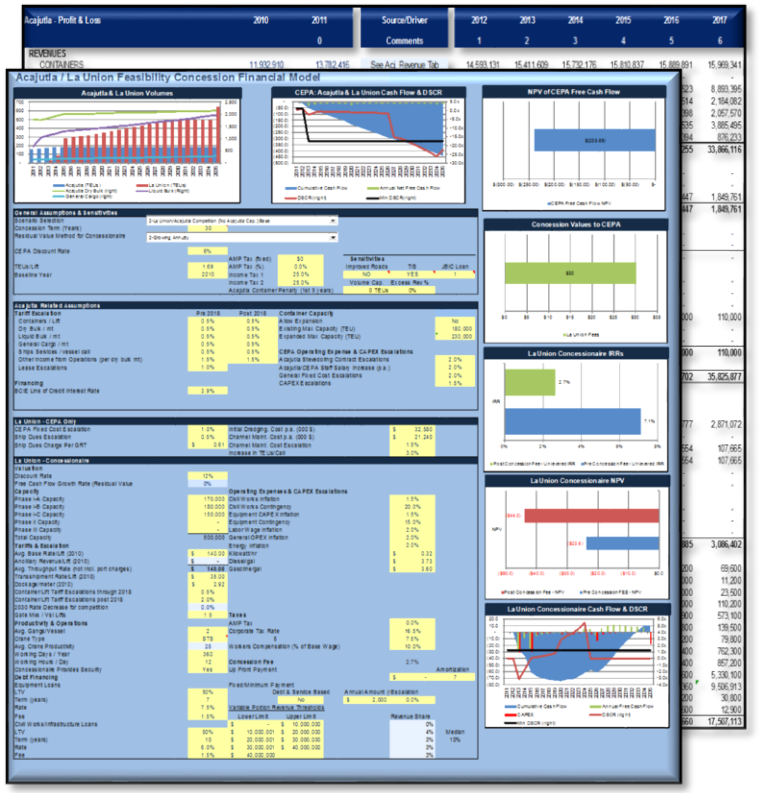
Valuation Methods
Income Approach

Estimates how much rent the operating business can sustain through development of a cash flow model



Key Data Inputs

- Traffic Projections
- Tariffs
- Capacity
- Capital Investments
- Operating Expenses

Key Outputs

- Free Cash Flow Before Lease Fees
- Net Present Value of Existing Business

Value of Approach

- Test impact of lease on the business
- Simulate range of leases under variable conditions
- Break even levels for minimum lease payments

2 Valuation Methods Replacement Cost Approach

Estimates rent based on recovering construction costs (adjusted for age), ongoing maintenance expenses, plus a return on capital

EXAMPLE

Calculation – Amortization Method

	Years	$ Mil
New Construction Cost	50	$ 200.0
Depreciation	40	$ (160.0)
Present Value		$ 40.0
Expected Usefull Life with Maint.	50	
Amortized Present Value		$ 0.8
Estimated Avg. Annual Capital Maint		$ 3.0
Cost of Capital, Admin & Margin		$ 0.4
Expected Annual Lease Rate		**$ 4.2**

EXAMPLE

Calculation – Cap Rate Method

	$ Mil
Present Value	$ 40.0
Regional Industrial Cap Rates	6.0%
	$ 2.40
Estimated Avg. Annual Capital Maint	$ 3.0
Expected Annual Lease Rate	$ 5.40

Key Data Inputs

- Construction cost estimates
- Age & condition assessments
- Useful life estimates
- Long-term capital maintenance budget
- Cost of capital, admin costs and margin reqs.
- Local industrial real estate cap rates

Key Outputs

- Annual lease rate ranges

Value of Approach

- Benchmark against other valuation methods
- Compares with local industrial real estate market

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Replacement Cost Approach
Estimated Remaining Value

Terminal Components	New Construction Cost	Useful Life	Installation Year	Current Age	Remaining Value
Grading & Aggregate Sub-Base	5,731,742	100	1973	39	3,496,362
Asphalt Surface & Base Course	24,236,181	20	1973	39	-
CIP & PVC Drainage Pipe	791,452	60	1973	39	277,008
RCP Drainage Pipe	2,336,866	100	1973	39	1,425,488
Inlets/Catch Basins	476,862	40	1973	39	11,922
Below Ground Electrical Components	9,467,129	60	1995	17	6,784,776
Substations	3,273,344	50	1995	17	2,160,407
Lighting Equipment	2,289,154	40	1993	19	1,201,806
Reefer Plugs	1,595,292	20	1995	17	239,294
Cameras	NA	NA	NA	NA	NA
Potable Water/Fire Protection	1,673,984	60	1973	39	585,894
Sanitary Sewer & Lift Station	292,412	15	1973	39	-
Ancillary Elements	1,720,248	10	1970	42	-
Rail Improvements	5,522,864	50	1973	39	1,215,030
Refrigerated Warehouse Bldgs.	18,928,235	40	1998	14	12,303,353
Other Buildings	31,549,209	40	1975	37	2,366,191
Wharf & Apron Structure	149,211,951	60	1973	39	52,224,183
Fenders	1,544,847	15	1970	42	-
Dredging	75,954,830	100	1970	42	44,053,801
Total Civil Works	$ 336,596,602				$ 128,345,515
High Value @ +30%					$ 166,849,170
Low Value @ -20%					$ 102,676,412

2 Replacement Cost Method Applied Cap Rate Results

Civil Works Based Lease Ranges		
@ +30% Civo Works Value	$	11,012,045
Civil Works Lease Component @ 6.6% Cap. Rate	$	8,470,804
@ -20% Civil Works Value	$	6,776,643

Cap rate derived from recent bond interest rate, principal, & 50 bp margin

Some Options to Consider

- Recovery of ongoing maintenance expenses
- Indirect expenses
- Underlying land value

Fun Fact: Less than 5% of Pirates are Mariners.

3 Valuation Methods Comparables Approach

Compares leases at other facilities to provide the range of rates the market is currently paying

		Considerations
Terminal Characteristics	▸ Geography & market size ▸ Throughput & terminal size ▸ Infrastructure features	**No terminals are alike**
Sample Pool	▸ Lease data availability ▸ Comparable relevance	**Data and metrics will differ**
Normalized Metrics	▸ Identify relevant denominators ▸ Adjust for sample pool variables ▸ Qualitative review	**Markets / geographies differ** **Not all data is available**

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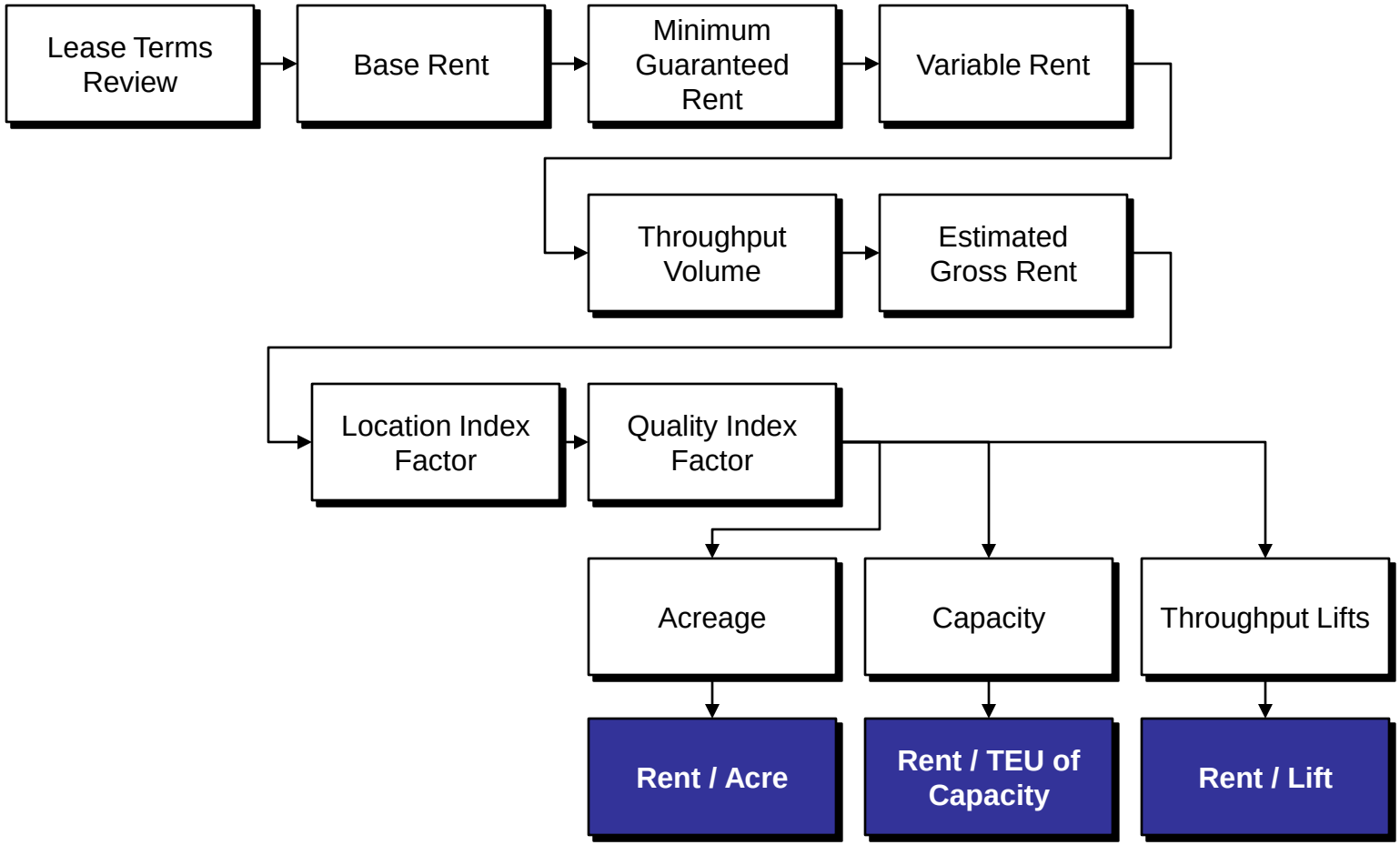
Comparables Method Summary Approach



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Comparables Method
Results – Container Terminal Component

Container Terminal Component

Terminal Name	Location	Est. Gross Rent	Location Index Factor	Quality Index Factor	Location & Quality Adjuted Results: Est. Gross Rent/Acre	Est. Gross Rent/TEU Capacity	Est. Gross Rent/Lift
Terminal 1	Near Local	$ 15,312,865	0.82	0.96	$ 64,461	$ 15.76	$ 25.19
Terminal 2	Near Local	$ 35,612,996	0.82	0.96	$ 62,999	$ 7.44	$ 23.81
Terminal 3	Near Local	$ 15,265,431	0.82	0.96	$ 57,224	$ 12.02	$ 21.41
Terminal 4	Near Local	$ 16,247,856	0.82	0.96	$ 36,544	$ 6.09	$ 15.46
Terminal 5	Local	$ 1,264,963	1.43	0.96	$ 62,918	$ 24.81	$ 83.49
Terminal 6	Local	$ 1,654,740	1.43	0.96	$ 60,739	$ 28.40	$ 54.61
Terminal 7	Near Local	$ 9,016,610	0.90	0.94	$ 26,859	$ 7.63	$ 20.62
Terminal 8	Distant	$ 4,015,944	0.68	0.94	$ 71,246	$ 18.34	$ 31.91
Terminal 9	Distant	$ 4,237,978	0.68	0.94	$ 69,140	$ 16.93	$ 32.31
Terminal 10	Distant	$ 10,634,420	0.68	0.96	$ 97,338	$ 17.80	$ 34.71
Terminal 11	Distant	$ 10,918,331	0.68	0.96	$ 109,654	$ 16.97	$ 32.67
Maximum Level					$ 109,654	$ 28.40	$ 83.49
Mean of Comp Data Set					$ 65,375	$ 15.65	$ 34.20
Minimum Level					$ 26,859	$ 6.09	$ 15.46

Mean values were 4 – 5 times higher than subject's values

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Comparables Method
Results - Warehouse and breakbulk components

Observed & Adjusted Temperature Controlled Space Market Values	PSF	Subject Temp. Cont.Warehouse Space (sq-ft)	Suggested Temperature Controlled Space Lease Ranges
High Value	$10.47	125,000	$ 1,308,615
Mean Value	$8.10	125,000	$ 1,012,203
Low Value	$7.19	125,000	$ 898,197

Observed Dry Warehouse Space Market Values	PSF	Subject Adjusted Dry Warehouse Space (sq-ft)	Suggested Dry Warehouse Space Lease Ranges
High Value	$5.01	150,000	$ 751,500
Mean	$4.55	150,000	$ 682,500
Low	$3.86	150,000	$ 579,000

Breakbulk Terminal Market Values	Lease Cost/Ton	Subject Break bulk Tons	Suggested Breakbulk Value Lease Ranges
High Value	$9.78	200,000.0	$ 1,955,017
Mean	$6.31	200,000.0	$ 1,262,963
Low	$3.20	200,000.0	$ 640,347

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Comparables Method
Aggregated results

Aggregated Suggested Lease Ranges

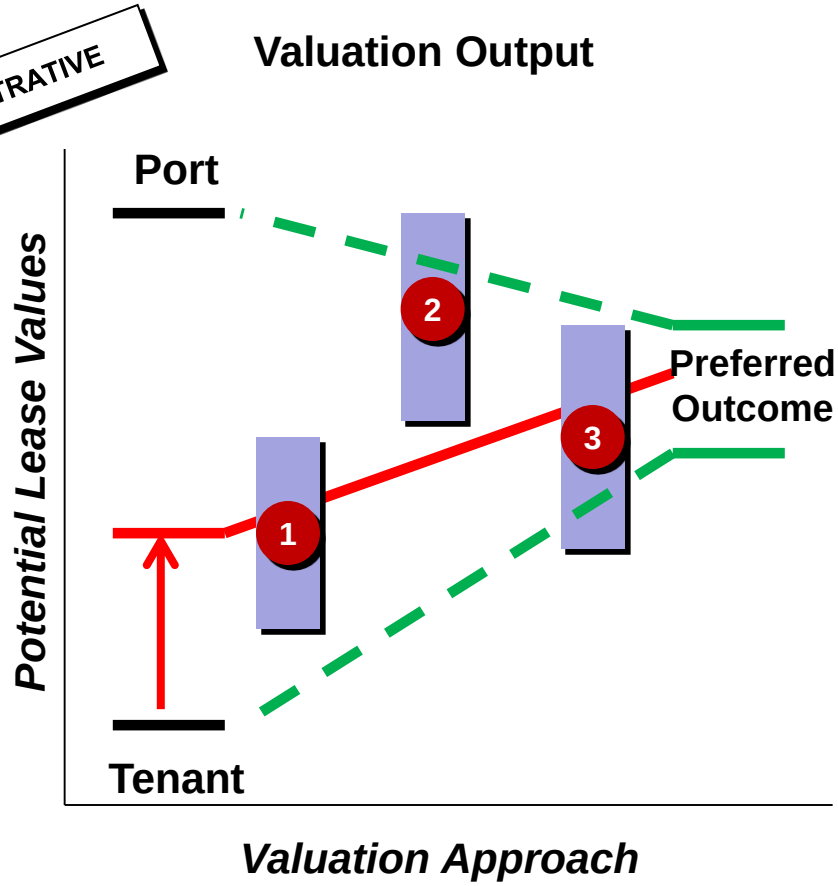
Combined Suggested Lease Ranges for Subject	Acreage Method	Capacity Method	Volume Method
Container Terminal Component	$ 6,900,000	$ 6,100,000	$ 5,100,000
Temperature Controlled Warehouse Space	$ 1,000,000	$ 1,000,000	$ 1,000,000
Dry Warehouse Space	$ 700,000	$ 700,000	$ 700,000
Break bulk Terminal Component	$ 1,300,000	$ 1,300,000	$ 1,300,000
Gross Suggested Annual Lease Range	$ 9,900,000	$ 9,100,000	$ 8,100,000

** Value Ranges Rounded to nearest $100,000*

The results of the comparables method closely aligned with the replacement cost method.

Closing the Initial Gap

ILLUSTRATIVE



Other Considerations

- Commercial risk assessment
- Fixed vs. Variable Rent Split
- Port vs. tenant investments
- Value of port offered services

Conclusions

- Successful lease negotiations requires homework
- Quantitative analysis is stronger than subjective opinion
- Using generally accepted valuation methods to form the baselines
  - Income approach: What can the underlying business sustain in terms of rent
  - Replacement Cost Approach: Industrial value assessment of residual assets
  - Comparables Approach: Apples to apples comparison of similar facilities
- In a perfect world, all three approaches should converge on a fair value
- Use your consultants