



Competitive Rate Benchmarking

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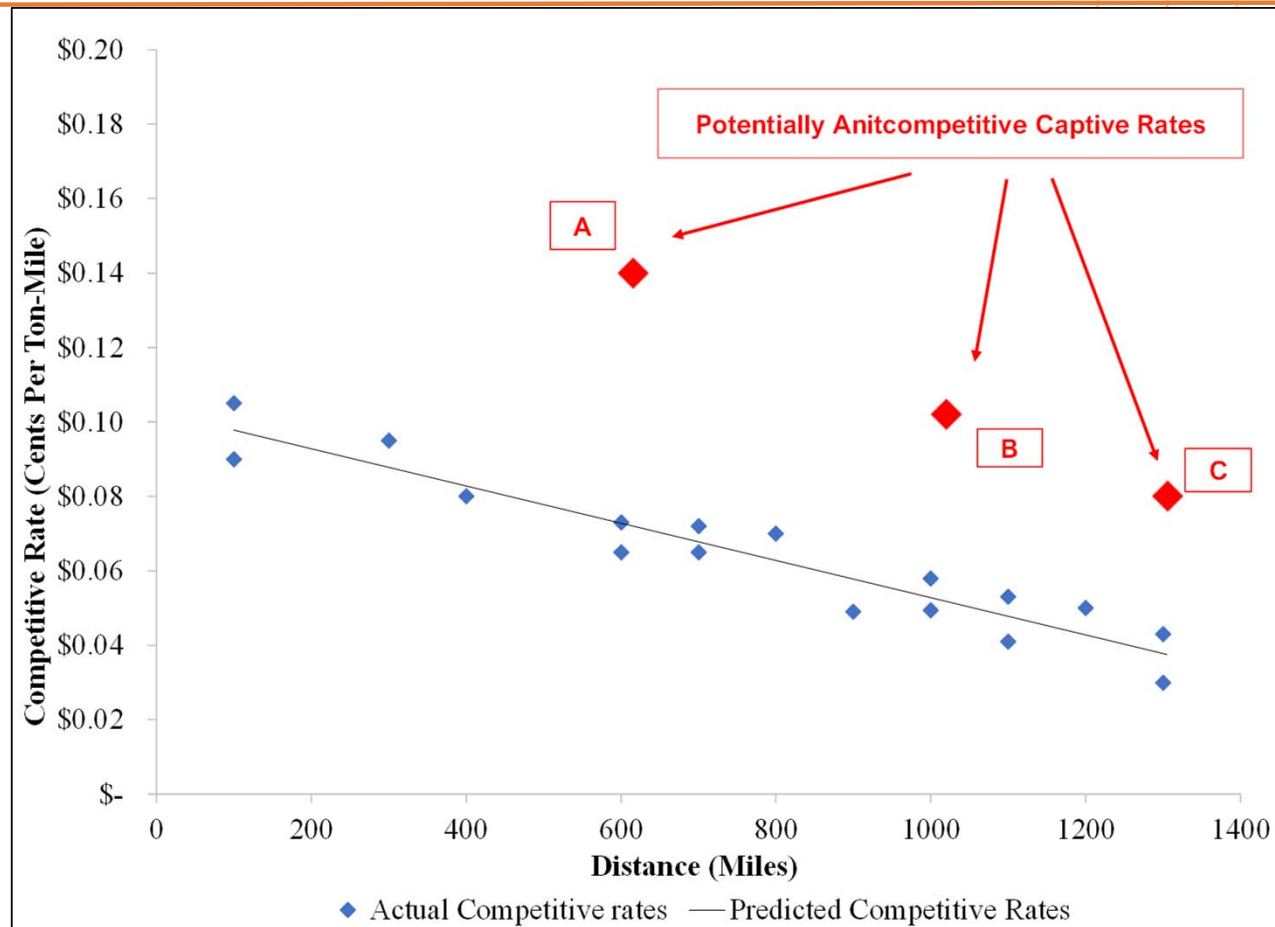
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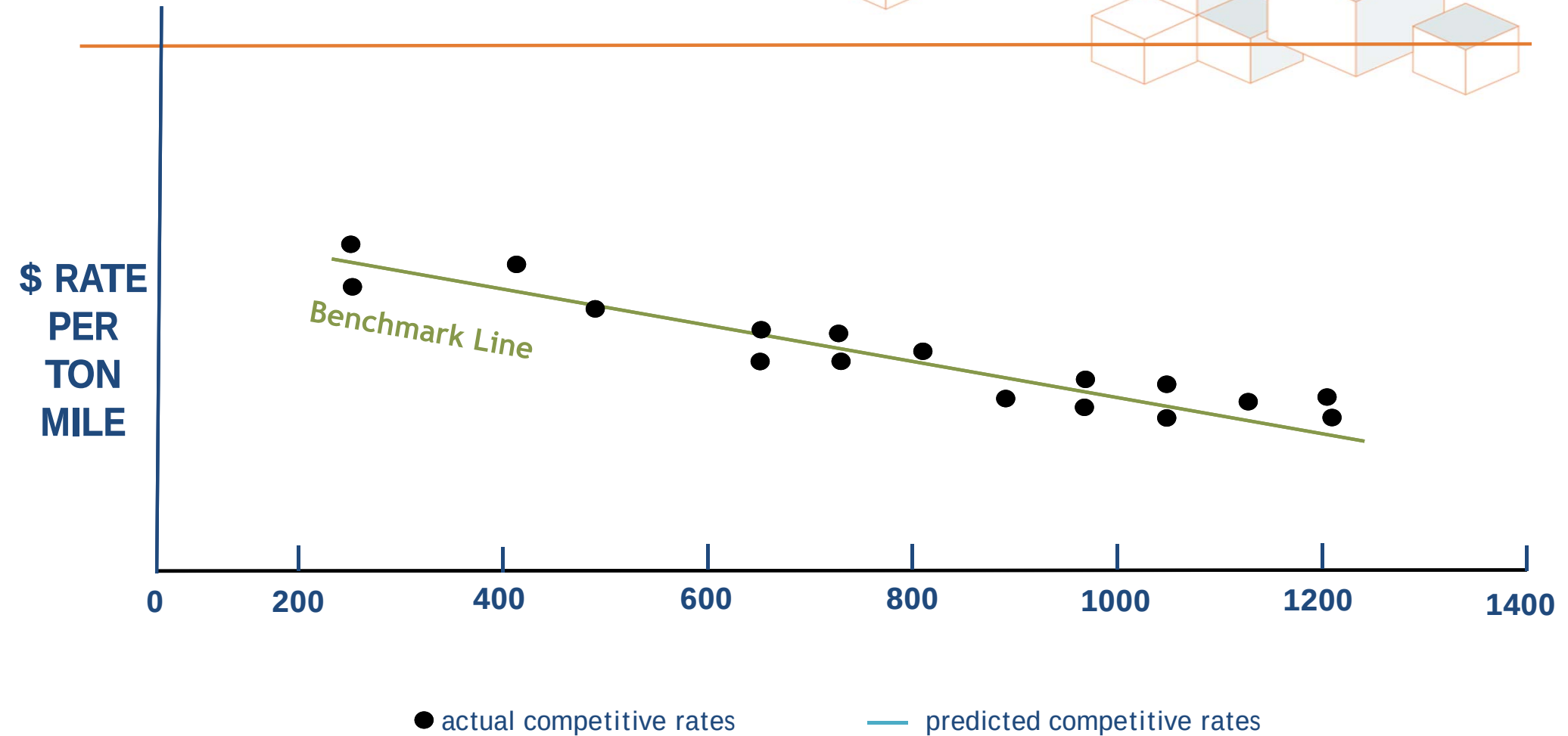


- **Econometric model predicts competitive “benchmark” rates using market data on competitive shipments**
- **Given characteristics of a potentially noncompetitive shipment, predict rate that would prevail under competition**
- **Identify unusually high rates based on how much a rate exceeds its competitive benchmark**

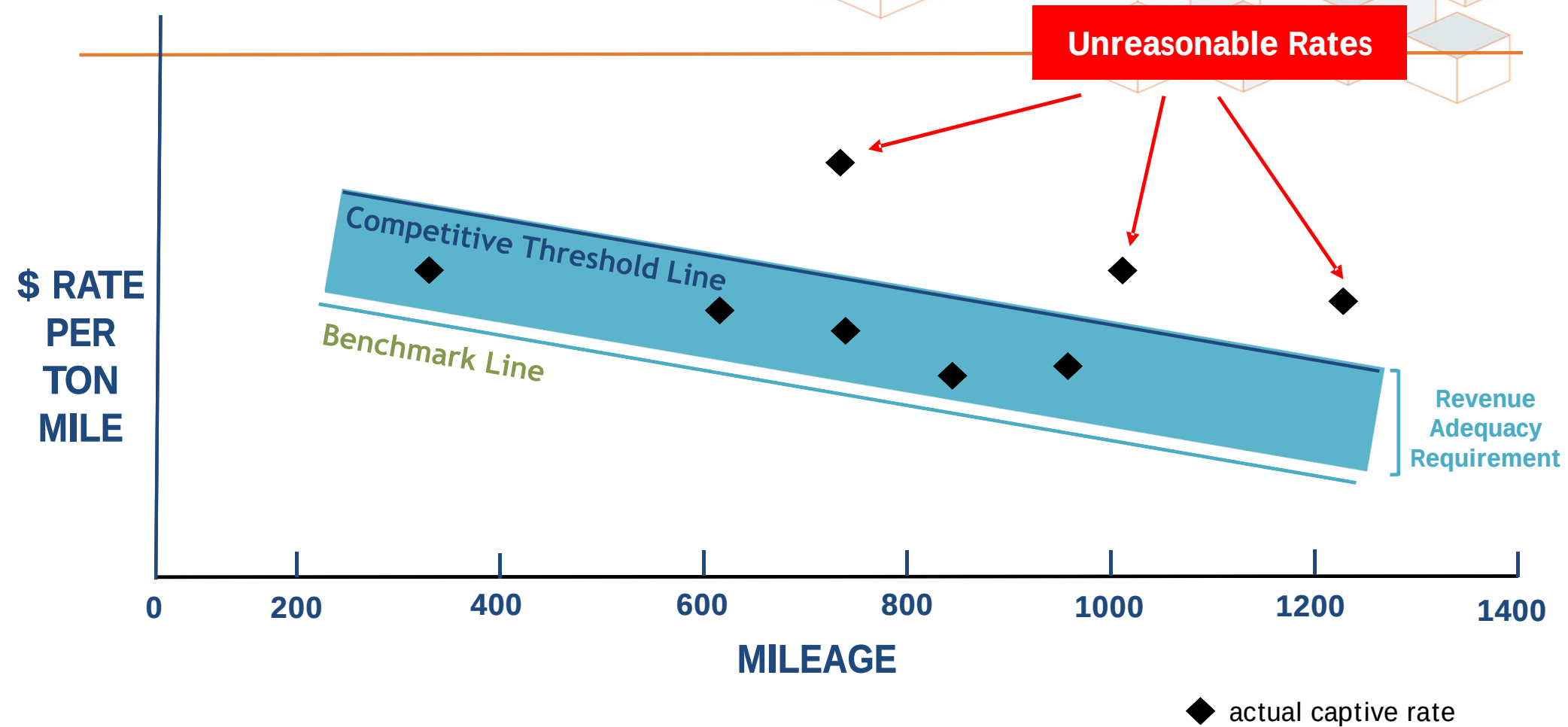
Benchmark Model: Simplified Illustration



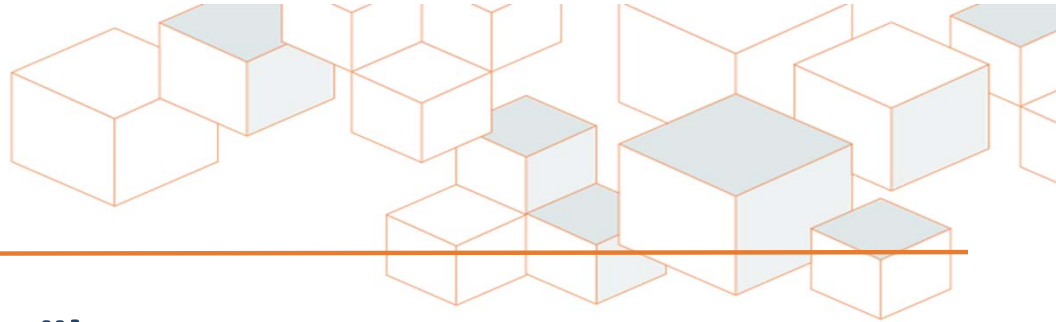
Step 1: Establish the Benchmark



Step 2: Determine Rate Reasonableness

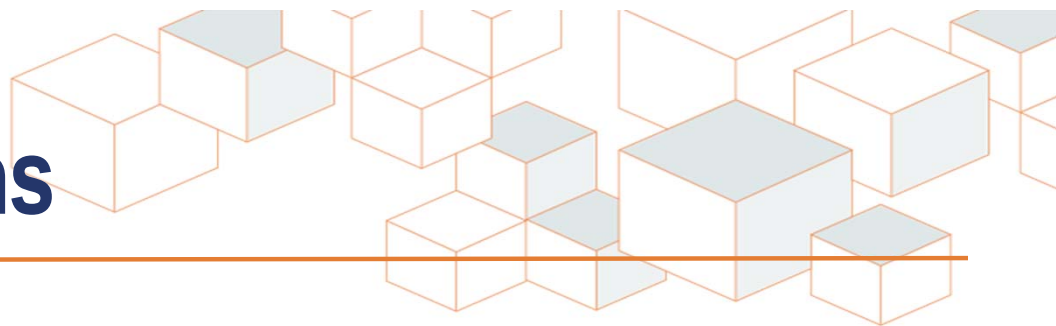


Database



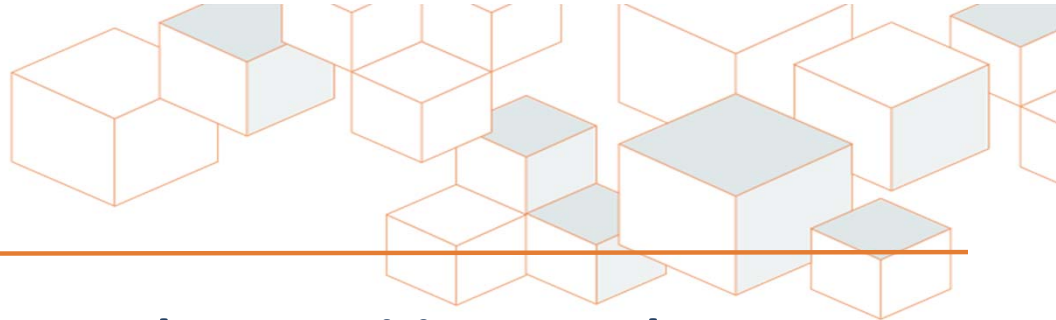
- **Carload Waybill Sample (“CWS”) 2006 – 2013**
 - Revenue per ton-mile (masked)
 - Shipment Characteristics (commodity, distance, size, etc.)
- **Geo-location of waybill origins & destinations**
- **Geo-location of distance to rail & water competition**

Competitive Screens



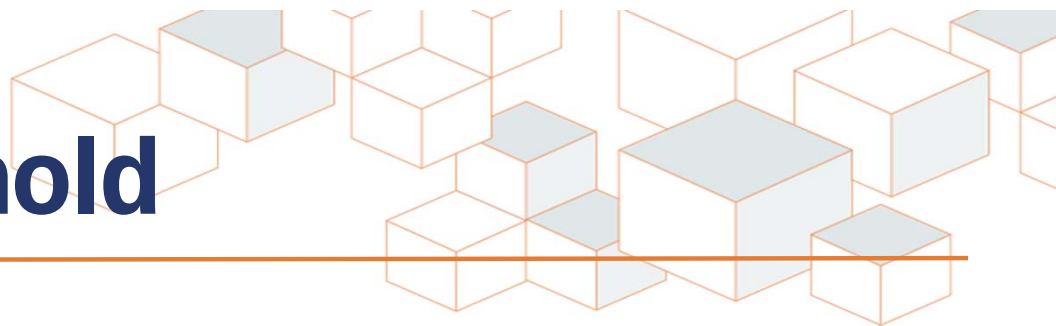
- **Deregulated (exempt); and/or,**
- **Within 5 mi of Class 1 RR at O&D (same RR at both); and/or,**
- **Within 5 mi of ports on same waterway at O&D; and/or,**
- **Within trucking screen (≤ 200 mi; ≤ 5 Carloads)**
- **By these screens, 76% of CWS shipments are competitive**

Results



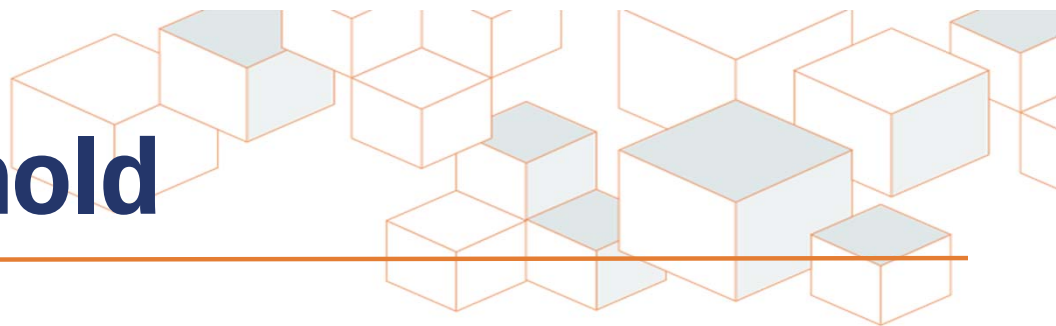
- **Potentially noncompetitive rates exceed competitive rates by 48% on average**
 - For **12%** of potentially noncompetitive sample, actual rate $\geq$ **double** predicted competitive rate
 - For **4%** of potentially noncompetitive sample, actual rate $\geq$ **3x** predicted competitive rate
 - For **1%** of potentially noncompetitive sample, actual rate $\geq$ **5x** predicted competitive rate

Competitive Threshold



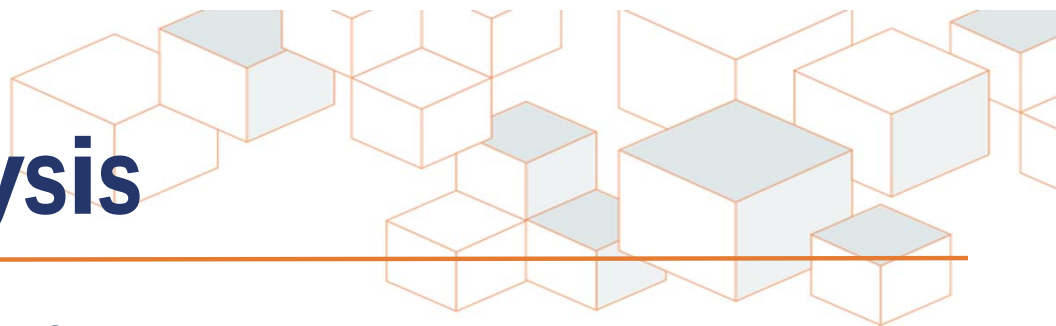
- ***Competitive Threshold (CT)*** = multiplier applied to competitive benchmark to determine maximum reasonable rate
- **STB would determine *CT*, based on:**
 - **Railroad revenue adequacy needs**
 - **Any other factors STB deems relevant**

Competitive Threshold



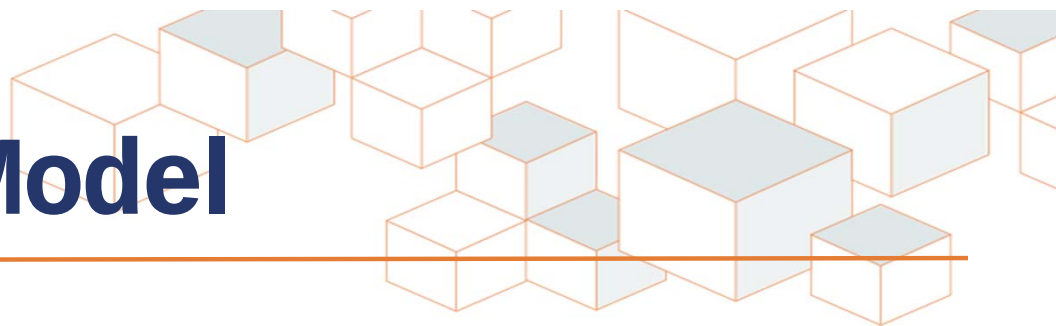
- *CT* preserves differential pricing
- *CT* not a cap on aggregate revenue or profit
- Rates, revenue, profit unconstrained on competitive routes
- Rates (potentially) constrained on captive routes only if sufficiently above competitive levels

Illustrative CT Analysis



- **Six-year revenue adequacy (RA) period**
 - Other timeframes could be used
- **Three RRs (BNSF, NS, & UP) are RA for 2008 – 2013**
- **All three remain RA under rate regulation (2008-2013)**
 - Assumes maximum relief for all potentially captive traffic
 - Includes Great Recession

Implementing the Model

A decorative graphic in the top right corner of the slide, consisting of several 3D cubes of varying sizes and orientations. The cubes are rendered with orange outlines and light blue shading on their visible faces, creating a sense of depth and geometric structure. They are arranged in a cluster that extends from the right edge towards the center of the slide.

- Use unmasked/most recent CWS data
- Fine-tune econometric model
- STB to select *CT*



Support for Revenue Adequacy Constraint

“[C]aptive shippers should not be required to continue to pay differentially higher rates than other shippers when some or all of that differential is no longer necessary to ensure a financially sound carrier capable of meeting its current and future service needs.” *Guidelines*, 1 ICC.2d at 535.

“[I]t is the policy of the United States Government...to maintain reasonable rates [1] where there is an absence of effective competition and [2] where rail rates provide revenues which exceed the amount necessary to maintain the rail system and to attract capital.” 49 U.S.C. 10101(6).



Support for Revenue Adequacy Constraint

“By imposing revenue adequacy as a ceiling, the ICC intends to insure that a captive shipper will ‘not be required to continue to pay differentially higher rates than other shippers when some or all of that differential is no longer necessary to ensure a financially sound carrier capable of meeting the current and future service needs.’ [Citing Guidelines]. **In other words** when a carrier has achieved revenue adequacy, the rate charged to a **captive** shipper will be the **same** as that determined **by competition** for non-captive shippers.”

Consolidated Rail Corp., 812 F.2d at 1444, 1450-51 (3rd Cir. 1987).