Public Meeting
Dec. 20, 2006

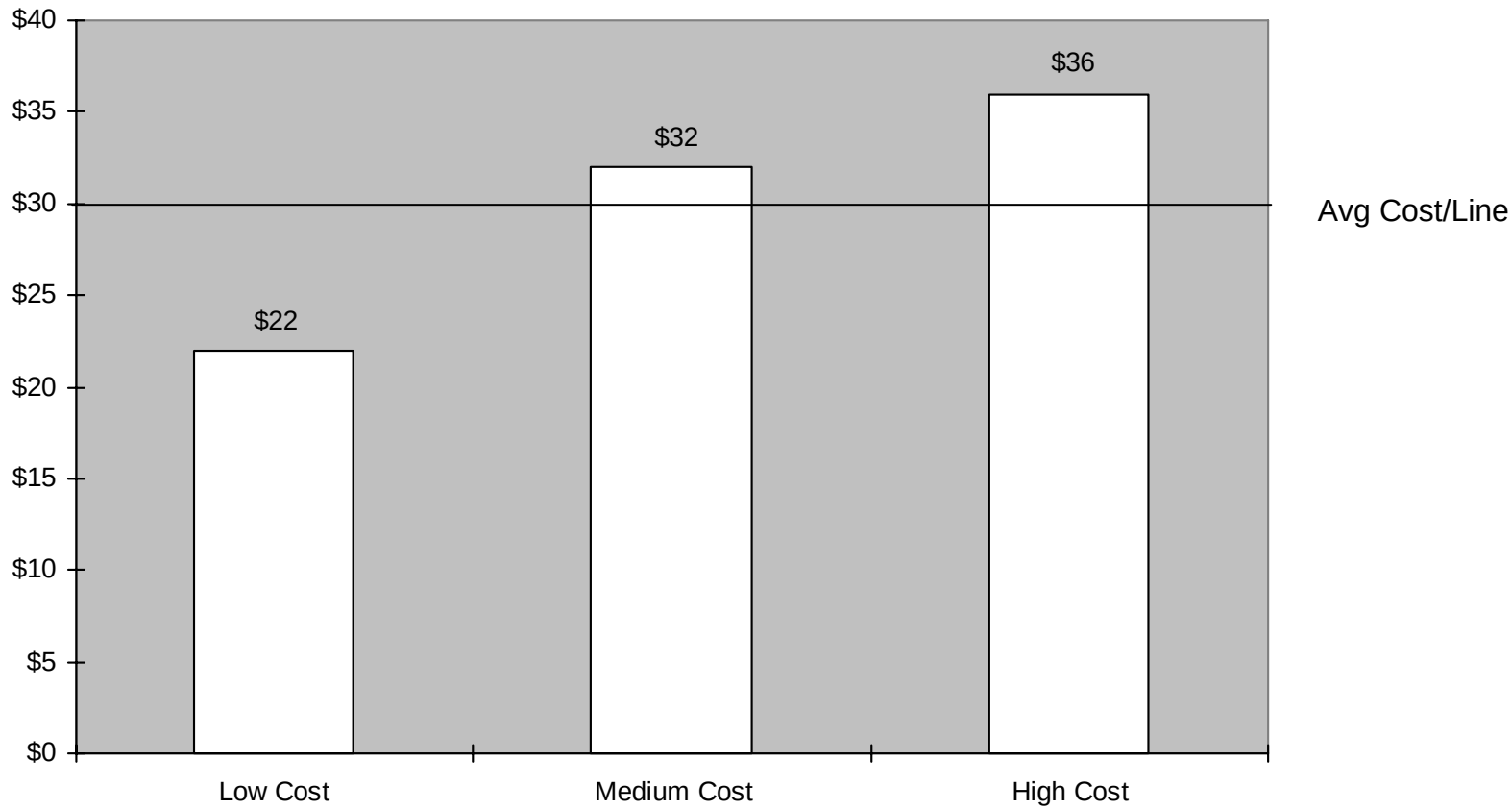
R-05-7

Review of USF Disaggregation

What is Disaggregation

- A FCC authorized process that allows the disaggregation and targeting of high cost USF support
- Goal is to prevent universal service from being used in an anti-competitive manner, with particularly emphasis on preventing:
  - Artificial barriers to entry in high cost areas
  - Artificial entry incentives in low cost areas
- It is a two step process:
  1. Allocating cost below the study area level (e.g., exchanges)
  2. Disaggregating USF support below the study area level so that per-line level of support is more closely associated with the cost of providing service
- If rates change as a result of disaggregation, or in conjunction with realigning cost to exchanges, it is also called “rate rebalancing.”

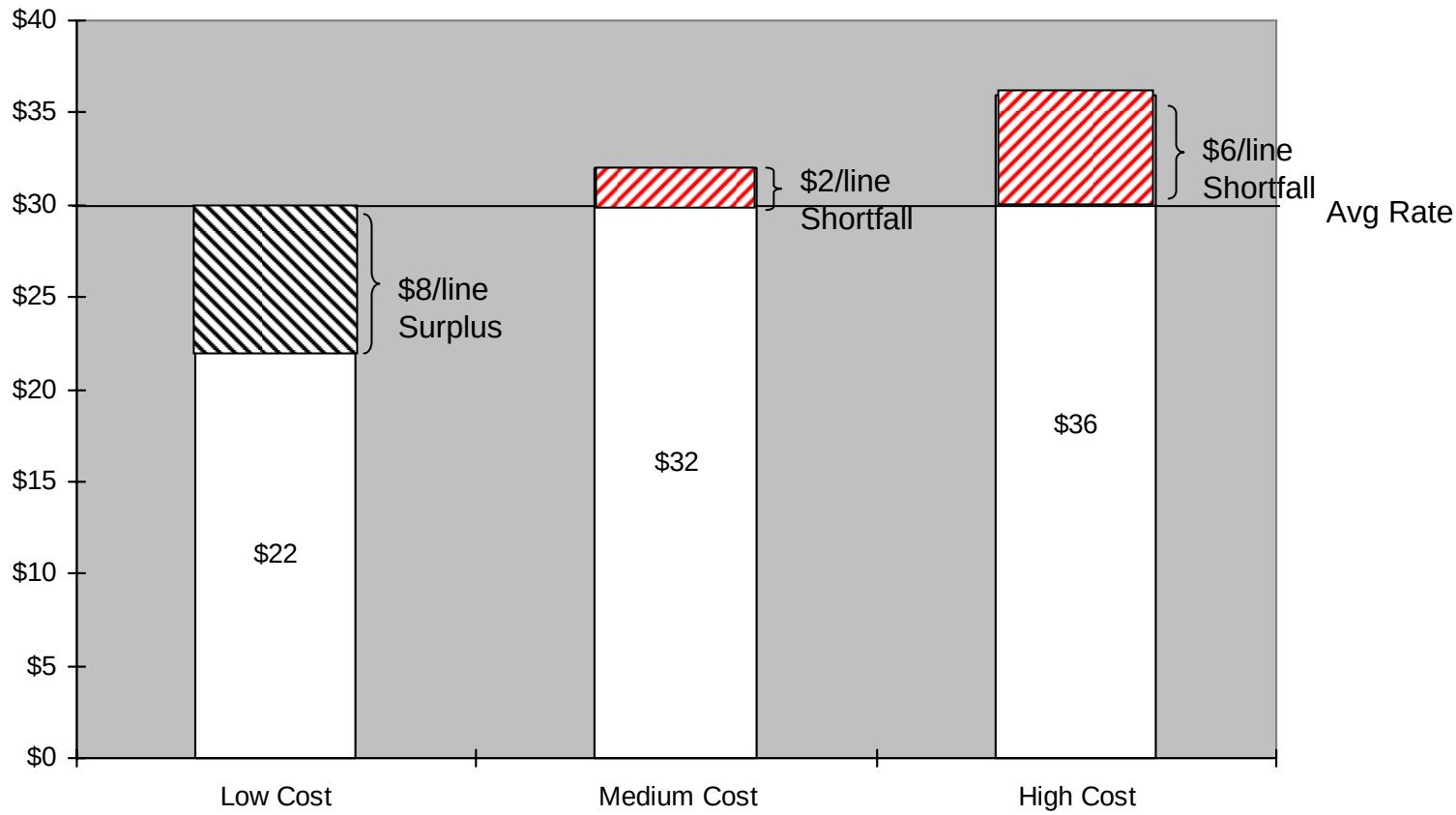
Hypothetical Study Area with 3 exchanges*



Assumption: Each exchange has an equal number of lines.

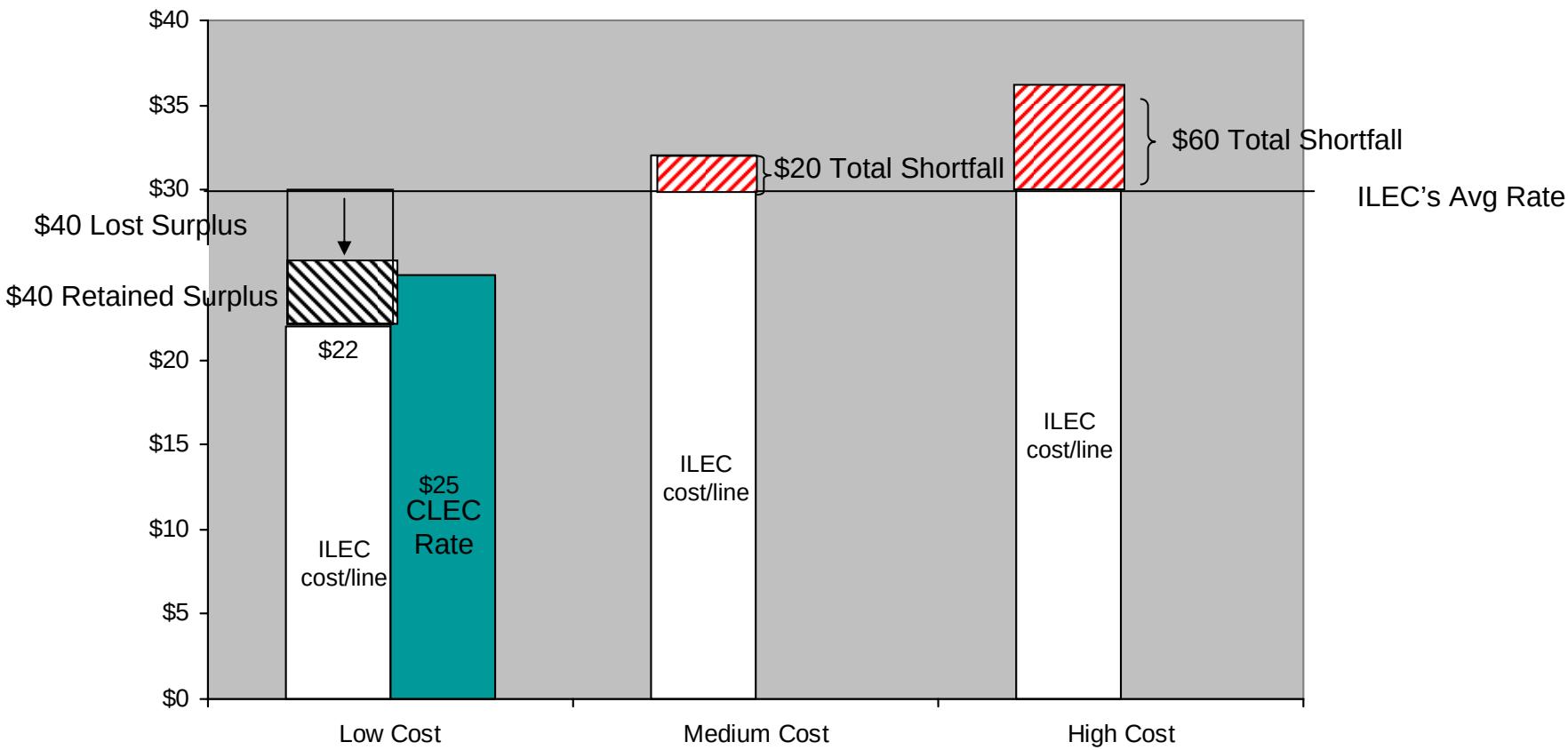
Note: These numbers are for illustrative purposes only and are not intended to represent actual costs.

Rate Averaging – Non-USF Implicit Support



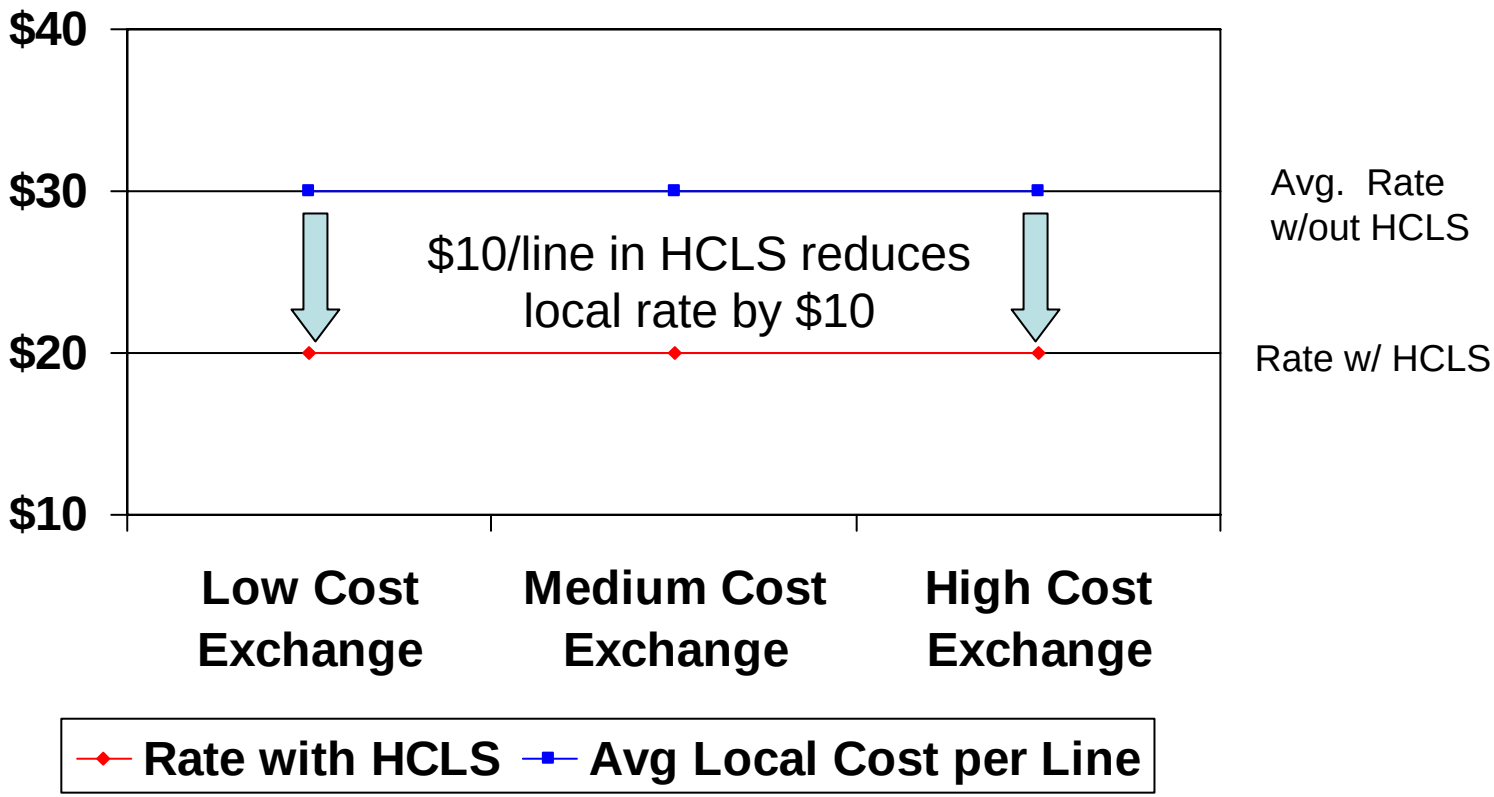
* Assumption: Each exchange has an equal number of lines.

Cream Skimming

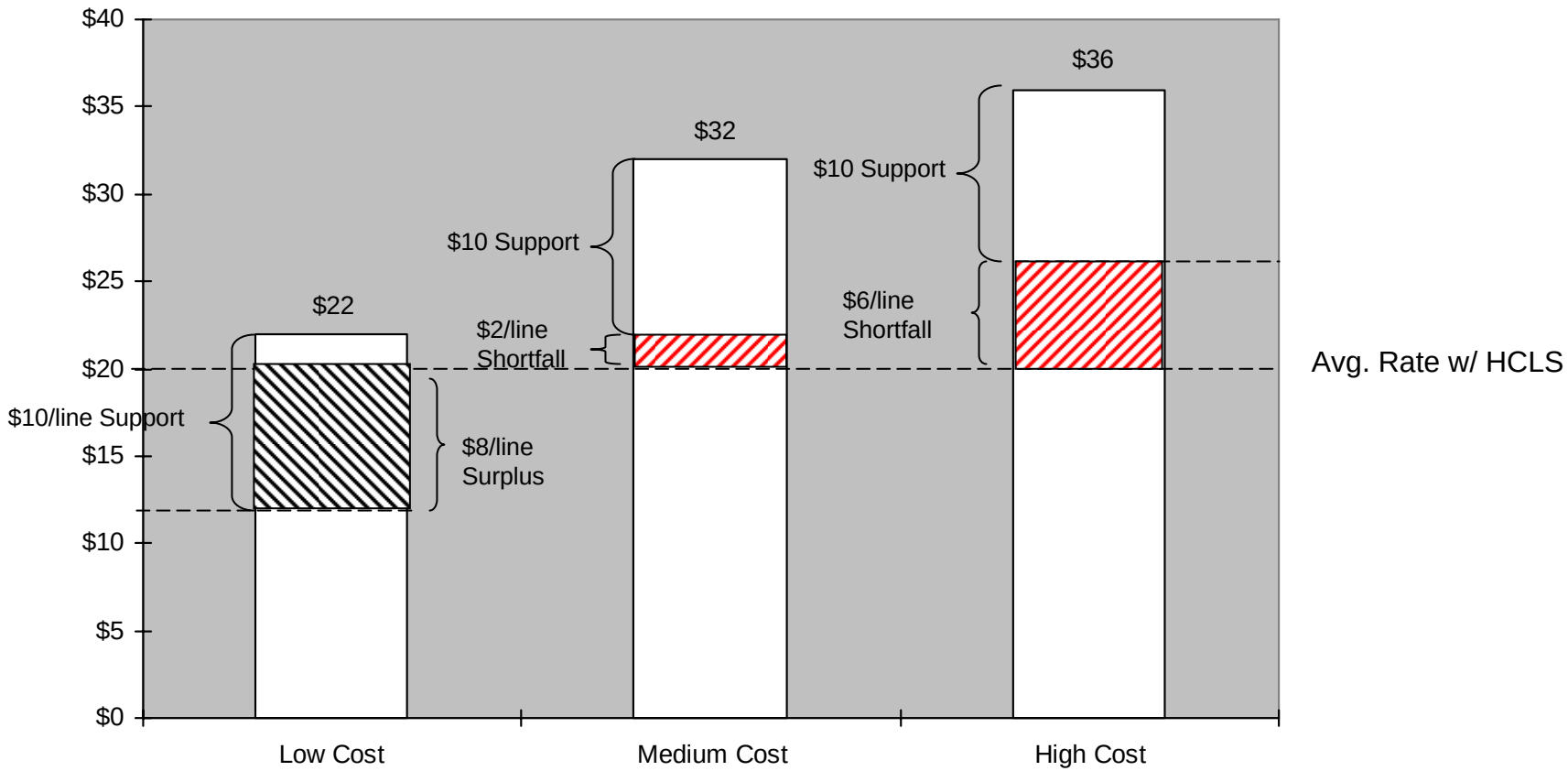


If each exchange has 10 lines and the CLEC takes 50% of the market share, the ILECs surplus falls to $40 (5 x $8) rather than $80 (10 x $8), and can no longer completely offset the shortfall in the other two exchanges ($80). This also assumes that the ILEC can't or doesn't reduce its rate in the low cost exchange.

Study Area with HCLS Prior to Disaggregation (pre-competition)



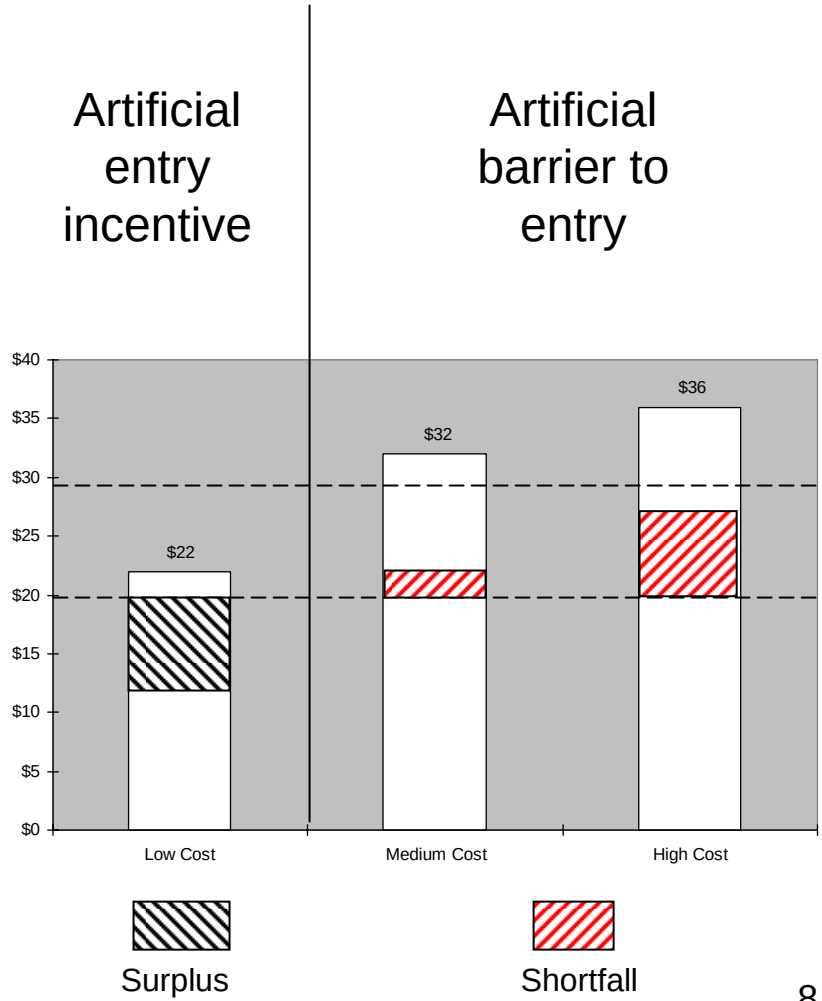
Surplus/Shortfall by exchange with uniform support per line (no competition yet)



This slide shows surplus/shortfall after costs are allocated by exchange but before disaggregation of HCLS. The shaded area for each exchange (which shows the surplus or shortfall per line) is equal to the rate minus the effective cost. The effective cost for each exchange is equal to the allocated exchange cost per line minus $10/line HCLS.

FCC Rationale for Disaggregation

- "Because support is averaged across all lines served by a carrier within its study area under the existing mechanism, the per-line support available throughout the study area is the same even though the costs throughout the study area may vary widely. As a result, artificial barriers to competitive entry in the highest-cost areas and artificial entry incentives in relatively low-cost portions of a rural carrier's study area are created."



How does Disaggregation of USF work?

- Recognizing the wide variety of circumstances between LECs, the FCC established three different disaggregation paths in order to provide great flexibility:
  - Path 1: No disaggregation
  - Path 2: No constraints but requiring state commission approval
  - Path 3: Self-certification but with constraints on how USF is disaggregated at the exchange level.

FCC 01-157, Disaggregation Order, paras. 148 - 151

Disaggregation: General Cost Rule

- “We conclude therefore that, as a general matter, support should be disaggregated and targeted below the study area level so that support will be distributed in a manner that ensures that the per-line level of support is more closely associated with the cost of providing service.”

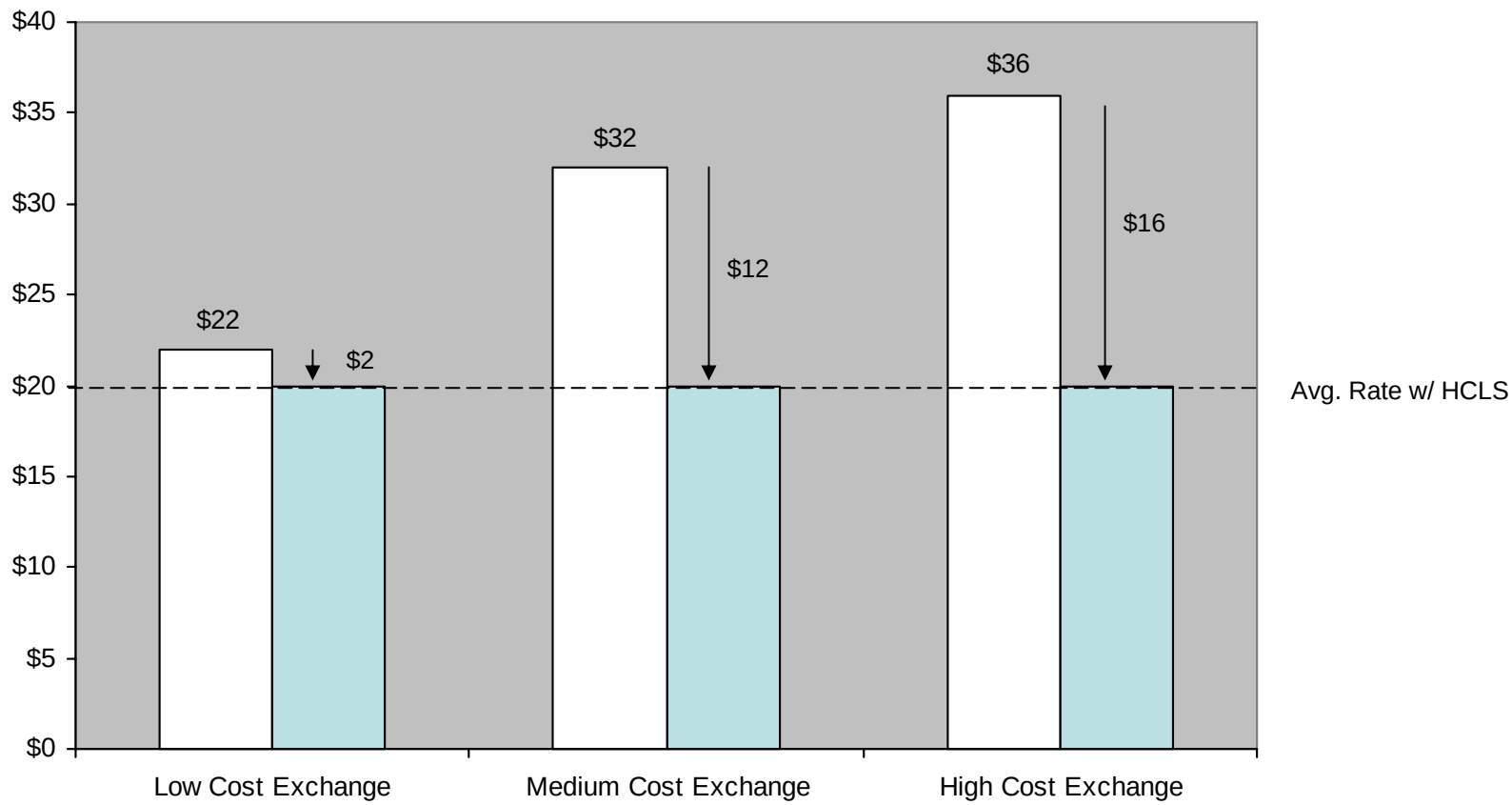
FCC 01-157, Disaggregation Order, para. 145

How have Alaska carriers interpreted the FCC's disaggregation requirements?

- Two methods proposed by carriers in R-03-3:
  - GCI Method: Maintain Geographically Averaged Rates throughout Study Area (except for unique situations such as United-KUC)
  - Rural Coalition Method: Apply HCLS formula on an exchange basis rather than study area basis

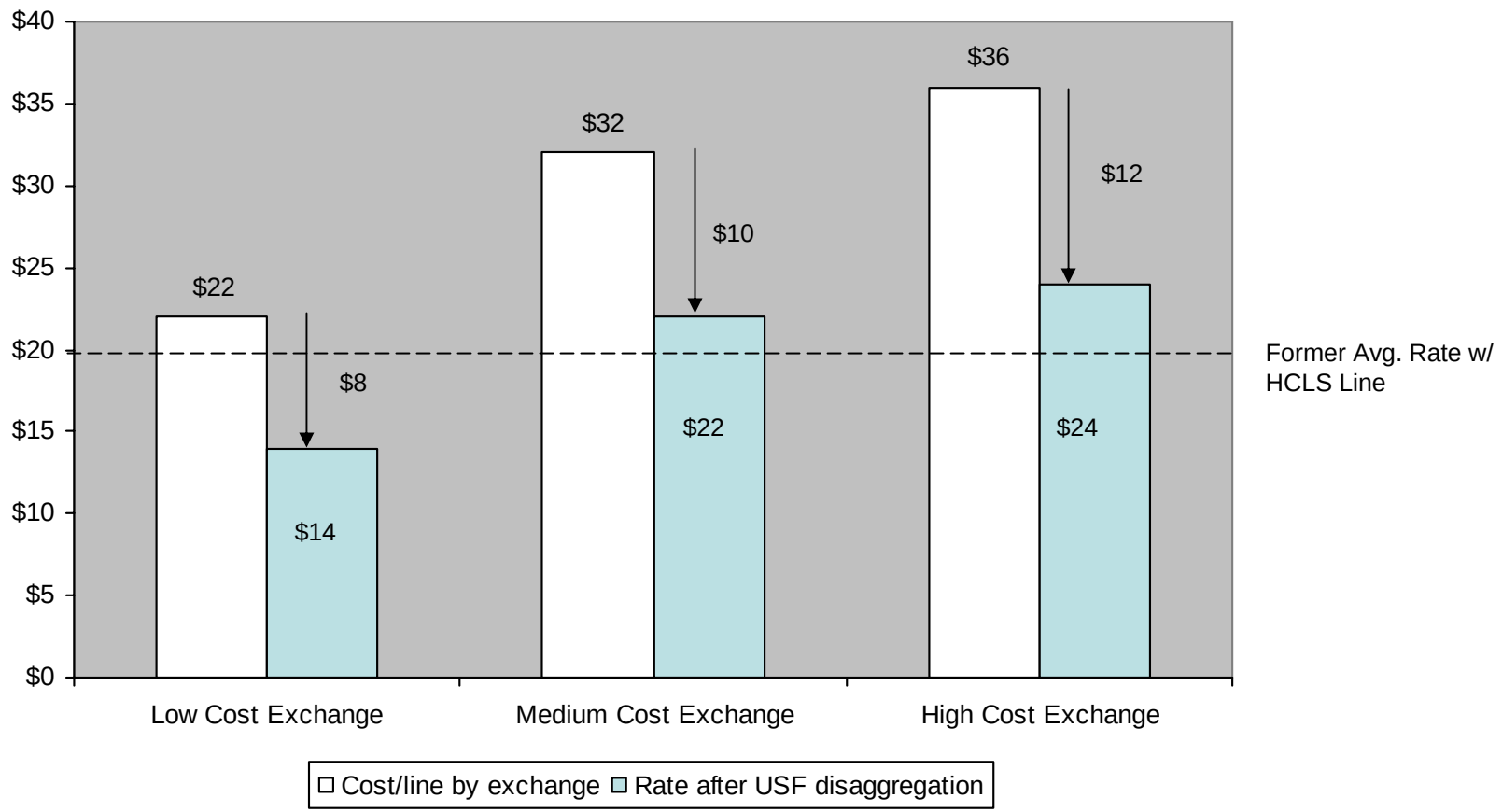
USF Disaggregation: GCI Method

Apply USF so as to maintain averaged rate

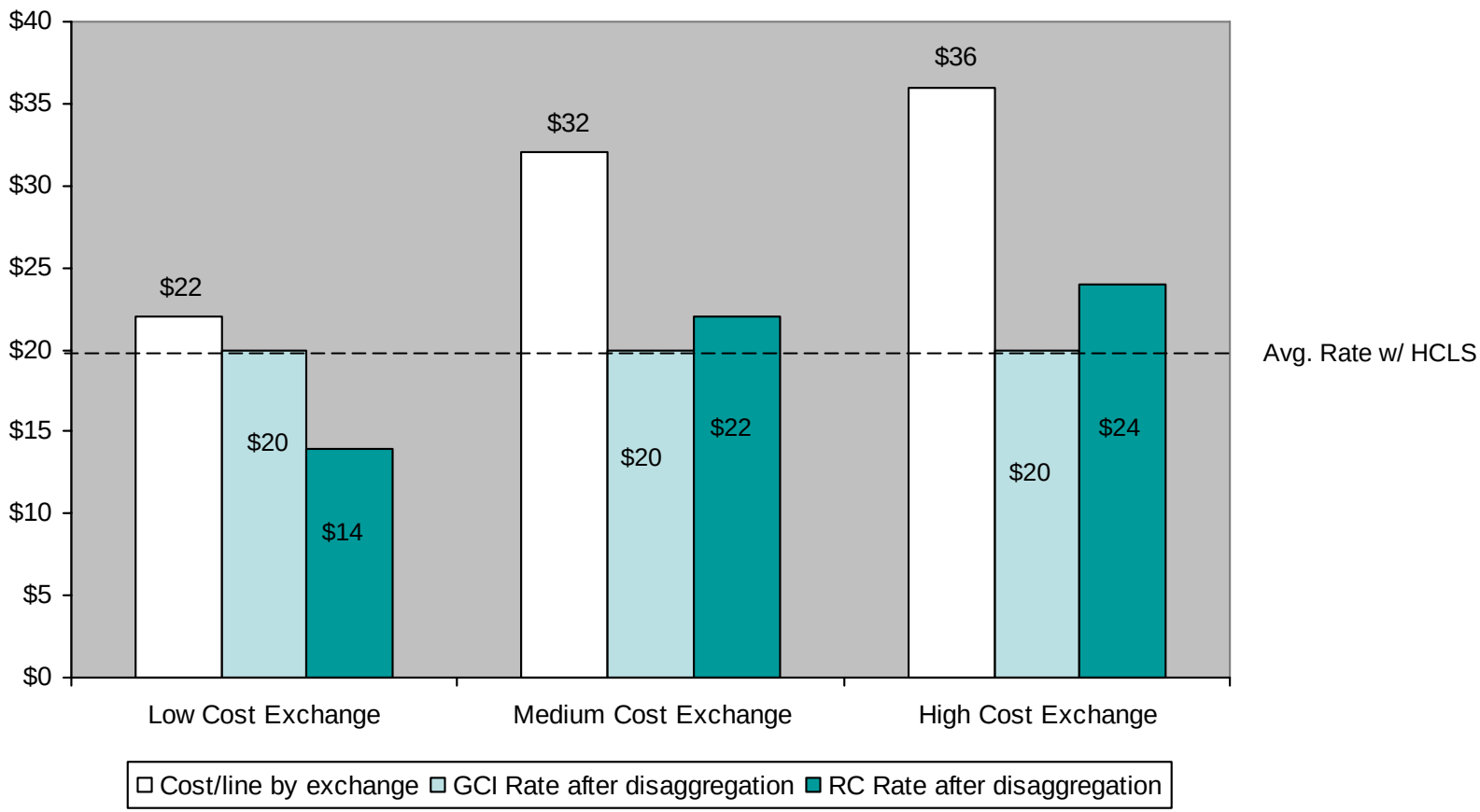


USF Disaggregation: Rural Coalition Method

Eliminates averaged rates



USF Disaggregation: Net Impact on Rates



RC Critique of GCI method

- It is illegal because:
  - It doesn’t remove implicit subsidies.
  - It is not cost based and therefore does not comply with FCC Disaggregation Order cost standard

Is the GCI method illegal?

GCI method is consistent with FCC policy:

It doesn't matter that the GCI method is end-result driven.

- The FCC Disaggregation Order specifically authorizes using disaggregated support to maintain averaged rates.
- "We recognized that carriers could choose a benchmark based upon affordability or averaged rates." para 151, fn 380.

Does the GCI Method create Implicit Subsidies?

- GCI's Response: No.
  - If all rates are below cost due to federal subsidy then no exchange is subsidizing any other exchange.
  - There is only one ILEC cost scenario that was discussed in which averaged rates throughout the study area could not be maintained using USF disaggregation, but GCI did not propose using study area-wide averaged rates in that case (United-KUC and Bethel)

GCI Critique of RC Method?

- It results in potentially unaffordable rates and unnecessarily creates a need for state Universal Service support.
- If FCC had intended the specific method proposed by RC it would have explicitly required it and would not have given carriers so much flexibility
- None of the Alaska LECs used the RC method when they filed their disaggregation plans several years ago.

Does the RC Method Result in Unaffordable Rates?

The Rural Coalition does not deny that its method could result in unaffordable rates. That is why they have petitioned for the Commission to create a state affordability fund.

Is there only one correct why to disaggregate HCLS?

- Staff Response: No
  - FCC provides a great deal of flexibility in fashioning disaggregation plans.
  - This flexibility is also reflected in the fact that the FCC gave state commissions almost unrestricted authority to modify disaggregation plans at any time.
    - “the state or appropriate regulatory authority may require on its own motion at any time the disaggregation of support in a different manner.” para 152

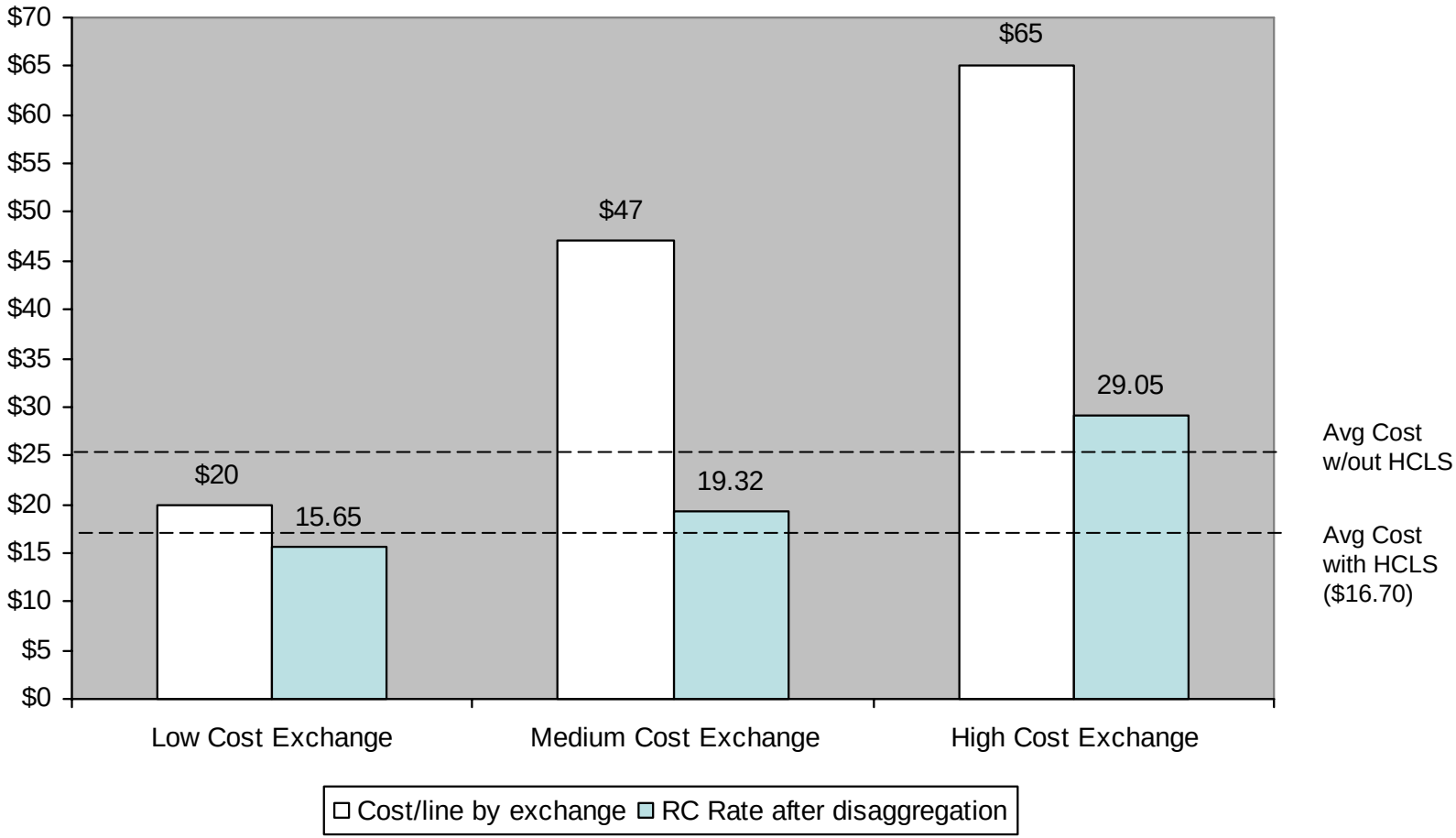
Policy considerations when disaggregating HCLS

- Does the proposed cost allocation fairly allocate costs and remove implicit support?
- Does the disaggregation method help to prevent artificial entry incentives and artificial entry barriers?
- Does the method produce affordable rates?
- Does the method produce rural rates that are reasonably comparable to urban rates?

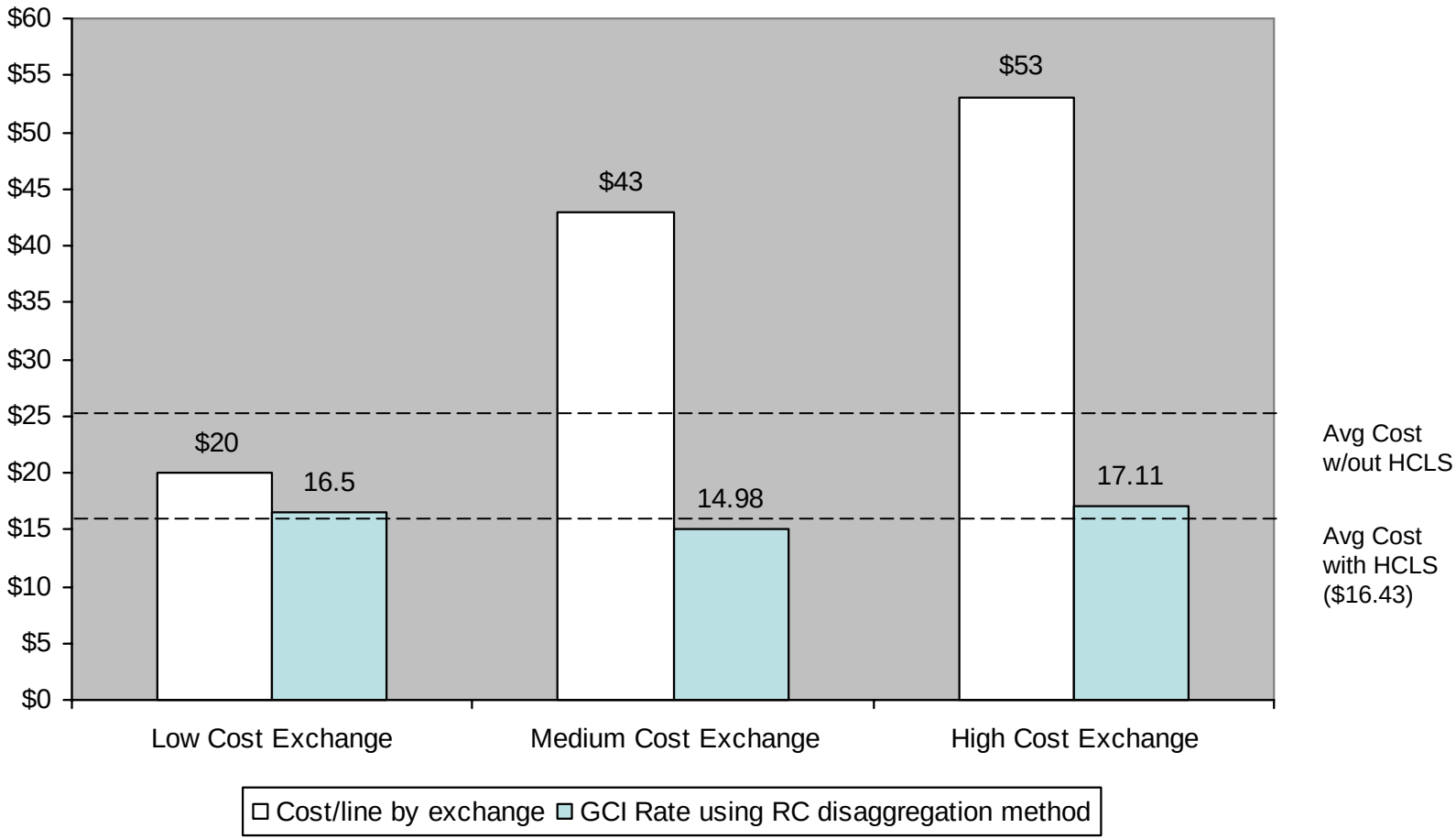
A Final Note on Cost Allocations

- We have assumed for simplicity that there is no dispute over how to allocate costs between exchanges (which is the first step in the USF disaggregation process).
- This is not necessarily a realistic assumption.
- In real life there are frequently disputes about how to disaggregate costs. For example…

Rural Coalition's Post Workshop Example using representative costs

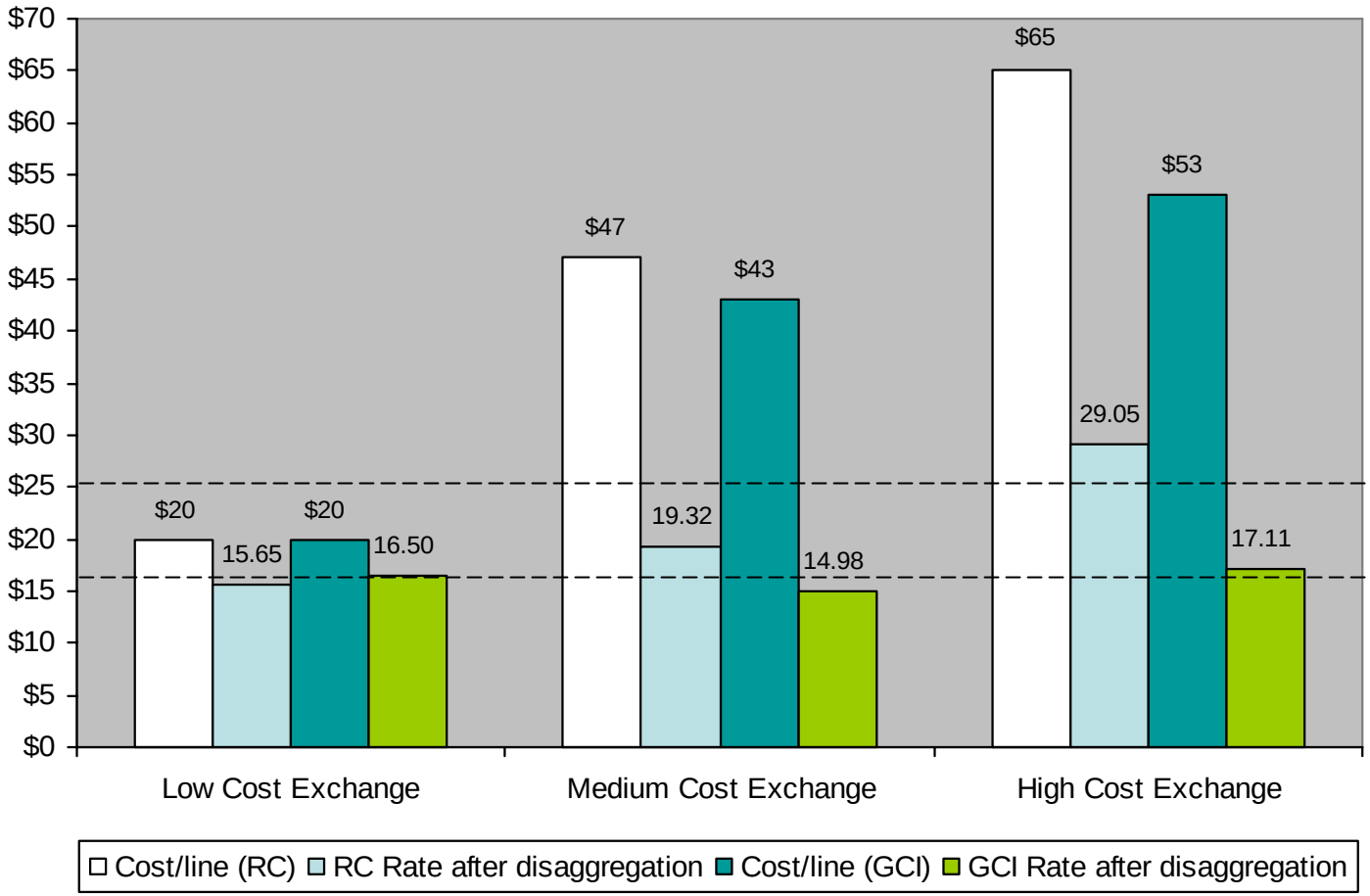


GCI's Modification to RC's Post Workshop Example



GCI modified the RC's cost allocation (white column) but used the RC's method for disaggregating HCLS.

Comparison of RC and GCI Calculations: Post Workshop



The difference between RC's final rate and GC'sI final rate in each exchange (e.g., $29.05 versus $17.11 in high cost exchange) is entirely due to cost allocation, not HCLS disaggregation methodology.

Appendix A: Rural Coalition Comprehensive Rate Rebalancing Example

Line		Total	Exchange	Exchange	Exchange
1	Total Company Revenue Requirement	$2,350,000	$1,500,000	$600,000	$250,000
2	% of Total Costs included in HCLS Calcuation	74%	80%	65%	55%
3	High Cost Loop Costs	$1,727,500	$1,200,000	$390,000	$137,500
4	Reprentative Separations Factor	47%	47%	47%	47%
5	Local Revenue Requirement	$1,104,500	$705,000	$282,000	$117,500
6	High Cost Loop Support - Stand-Alone	$372,909	$141,604	$166,101	$65,205
7	Loops	3,650	3,000	500	150
8	Cost of Service per loop (Line 5/ Line 7)	$302.60	$235.00	$564.00	$783.33
9	High Cost Loop Support - Stand-Alone / line	$102.17	$47.20	$332.20	$434.70
10	Net Cost of Service	$200.44	$187.80	$231.80	$348.80
11	**Required Rate (Line 10/12 months)**	**$16.70**	**$15.65**	**$19.32**	**$29.07**
12	Cost Ratios - compared to next lower cost exch			2.40	1.39
13	Support ratio - compared to next lower cost exch.			7.04	1.31
14	High Cost Loop Costs Per Loop (Line 3/Line 7)	473.29	400	780	916.67

Rural Coalition Post-Workshop Comments, March 7, 2005, Exhibit 2, p. 7 of 9

Appendix B: RC HCLS Calculation

HCLS Calculation

High Cost Loop support is provided if per-line costs exceed the national average cost per line (NACPL) by certain thresholds as follows:

Loop cost up to 115% of NACPL is 0%
Above 115% of NACPL the carrier receives 65% of the difference in support
Above 150% of NACPL the carrier receives 75% of the difference in support

	Per Loop Cost	Support Level
2004 NACPL	281.67	0%
1.15 of NACPL (281.67 x 1.15)	323.92	65%
1.50 of NACPL (281.67 x 1.50)	422.51	75%

Line		Total Company	Low Cost Exchange	Med Cost Exchange	High Cost Exchange
1	Per Loop Cost per Example, Line 14	473.29	400	780	916.67
2	Loop cost exceeds 1.15 benchmark	149.37	76.08	456.08	592.75
3	Loop cost exceeds 1.50 benchmark	50.78	-22.51	357.5	494.16
4	65% of cost exceeding 1.15 benchmark	97.09	49.45	296.45	385.29
5	Additional 10% of cost exceeding 1.5 benchmark	5.08	-2.25	35.75	49.42
6	Total Support per Loop	102.17	47.2	332.2	434.7
7	Total Support -- Total Company and By Exchange	372909	141604	166101	65205

Appendix C: GCI Modification to RC Example

		Total	Low Cost	Medium Cost	High Cost
Line		Total	Exchange	Exchange	Exchange
1	Total Company Revenue Requirement	$2,350,000	$1,500,000	$600,000	$250,000
2	% of Total Costs included in HCLS Calcuation	74%	80%	65%	55%
3	High Cost Loop Costs	$1,727,500	$1,200,000	$390,000	$137,500
4	Reprentative Separations Factor	46.5%	49.0%	42.7%	38.4%
5	Local Revenue Requirement	$1,092,500	$735,638	$255,957	$96,011
6	High Cost Loop Support - Stand-Alone	$372,909	$141,604	$166,101	$65,205
7	Loops	3,650	3,000	500	150
8	Cost of Service per loop (Line 5/ Line 7)	$299.32	$245.21	$511.91	$640.07
9	High Cost Loop Support - Stand-Alone / line	$102.17	$47.20	$332.20	$434.70
10	Net Cost of Service	$197.15	$198.01	$179.71	$205.37
11	**Required Rate (Line 10/12 months)**	**$16.43**	**$16.50**	**$14.98**	**$17.11**
12	Cost Ratios - compared to next lower cost exch			2.09	1.25
13	Support ratio - compared to next lower cost exch.			7.04	1.31
14	High Cost Loop Costs Per Loop (Line 3/Line 7)	473.29	400	780	916.67

GCI Post-Workshop Reply Comments, March 14, 2005, Exhibit 3

Appendix D: GCI Disaggregation Cost Calculation

Monthly USF$ = $(Lines_L \times USF_L) + (Lines_M \times (USF_L + Cost_M - Cost_L)) + (Lines_H \times (USF_L + Cost_H - Cost_L))$

"L", "M", "H" refer to low cost, medium cost, and high cost zones respectively.

"Lines" is the number of lines in the indicated zone.

"USF" is the disaggregated USF per line per month for the indicated zone.

"Cost" is the cost per line in the indicated zone.

GCI Post-Workshop Comments, March 7, 2005, p.4