Nevada's Consolidated Tax

A Review and Analysis of Alternatives

APPLIED ANALYSIS

Presentation Background

- Applied Analysis was originally retained by the City of Henderson and the City of Las Vegas to review and analyze Nevada's Consolidated Tax (C-Tax) distribution formula
- Expanded working group, process
- This analysis remains a work-in-progress, with a number of important limitations
- This presentation is intended to provide a status update relative our process and our preliminary observations

The Process Thus Far

Sept. 2011
Project Begins

Sept. 2011 – Dec. 2011
- C-Tax Research
- C-Tax Model Development

Dec. 2011 – Jan. 2012
- Alternative Scenarios
- Expert Round Tables
- Technical Model Vetting

Feb. 2012 – Mar. 2012
- Alternative Vetting
- Sensitivity Testing
- Impact Assessment

April 2011 →
C-Tax Working Group

- Process is On-going
- Solutions Are Not Final or Definitive
- Intended as Strategies to Mitigate/Address Current Challenges
- A Tool and an Approach to Compare and Vet Alternatives

Alternatives

- Per Capita Distribution
- AV-based Distribution
- Point-of-Origin Distribution
- Share-of-Total Distribution
- Novel Formulas
- Reverting Back to the Original C-Tax
- Modification to Current Formula

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- **Modification to Current Formula**

Issue #1

Base Calculations

Year 1

	BASE	CPI FACTOR	ADJUSTED BASE	EXCESS	TOTAL DISTRIBUTION
ENTITY A	$1,000,000	3.00%	$1,030,000	$250,000	$1,280,000
ENITITY B	$500,000	3.00%	$515,000	$150,000	$665,000
TOTAL	$1,500,000	3.00%	$1,545,000	$400,000	$1,945,000

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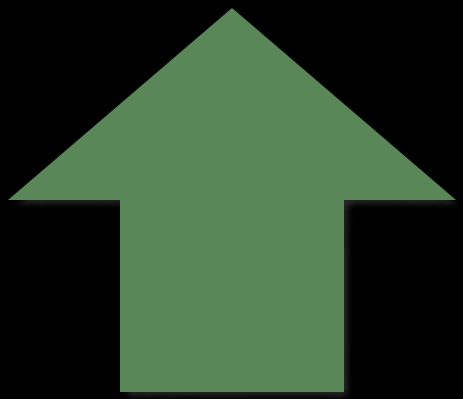

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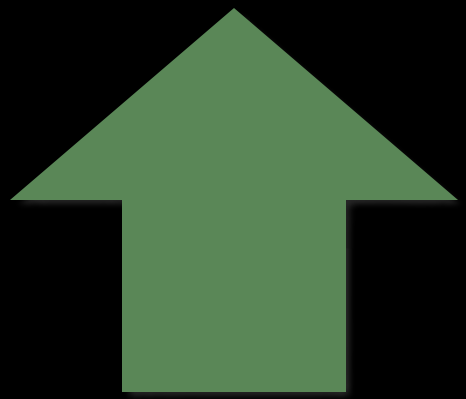

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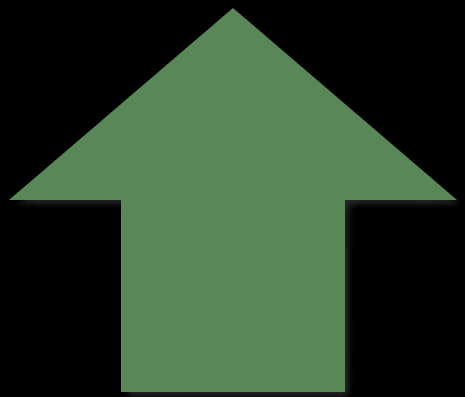

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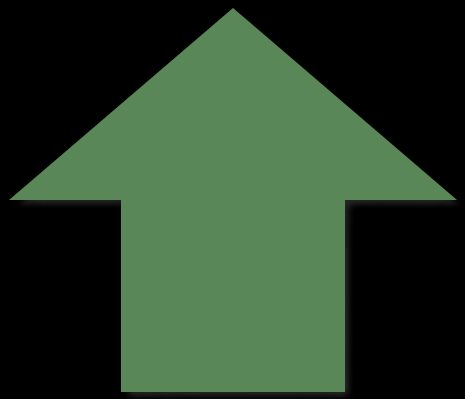

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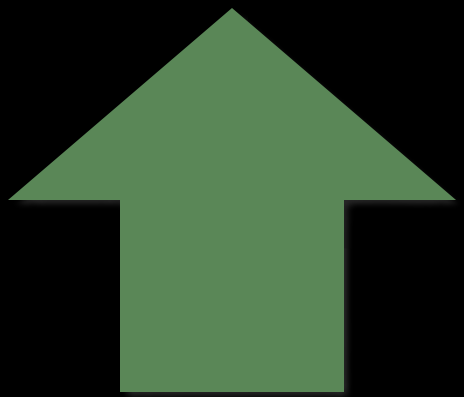

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What Should Be the Base For Year 2?

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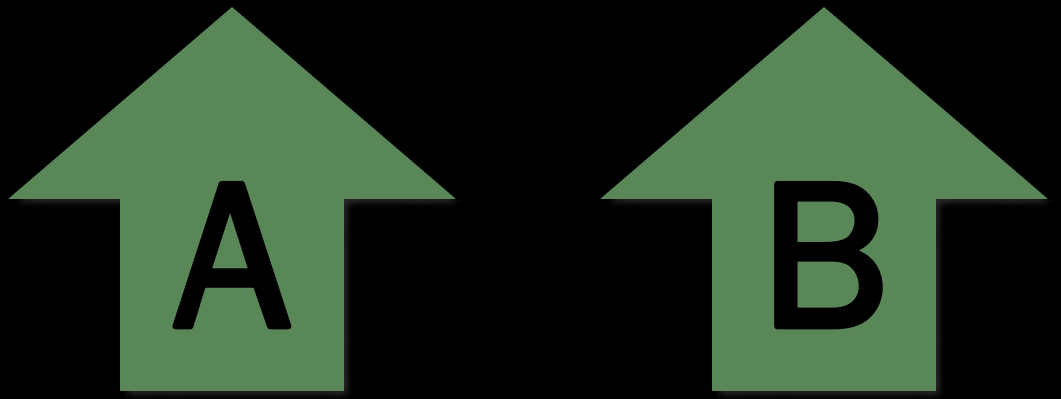

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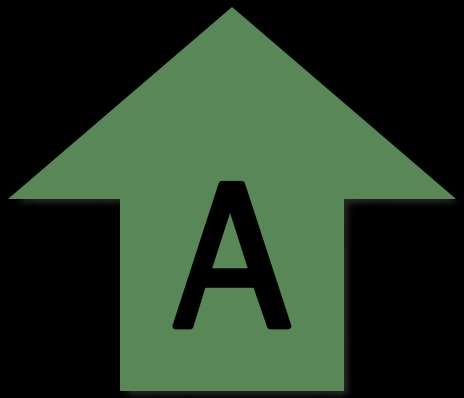

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ENITITY B	$515,000	3.00%	$530,450	$300,000	$830,450
TOTAL	$1,545,000	3.00%	$1,591,350	$800,000	$2,391,350

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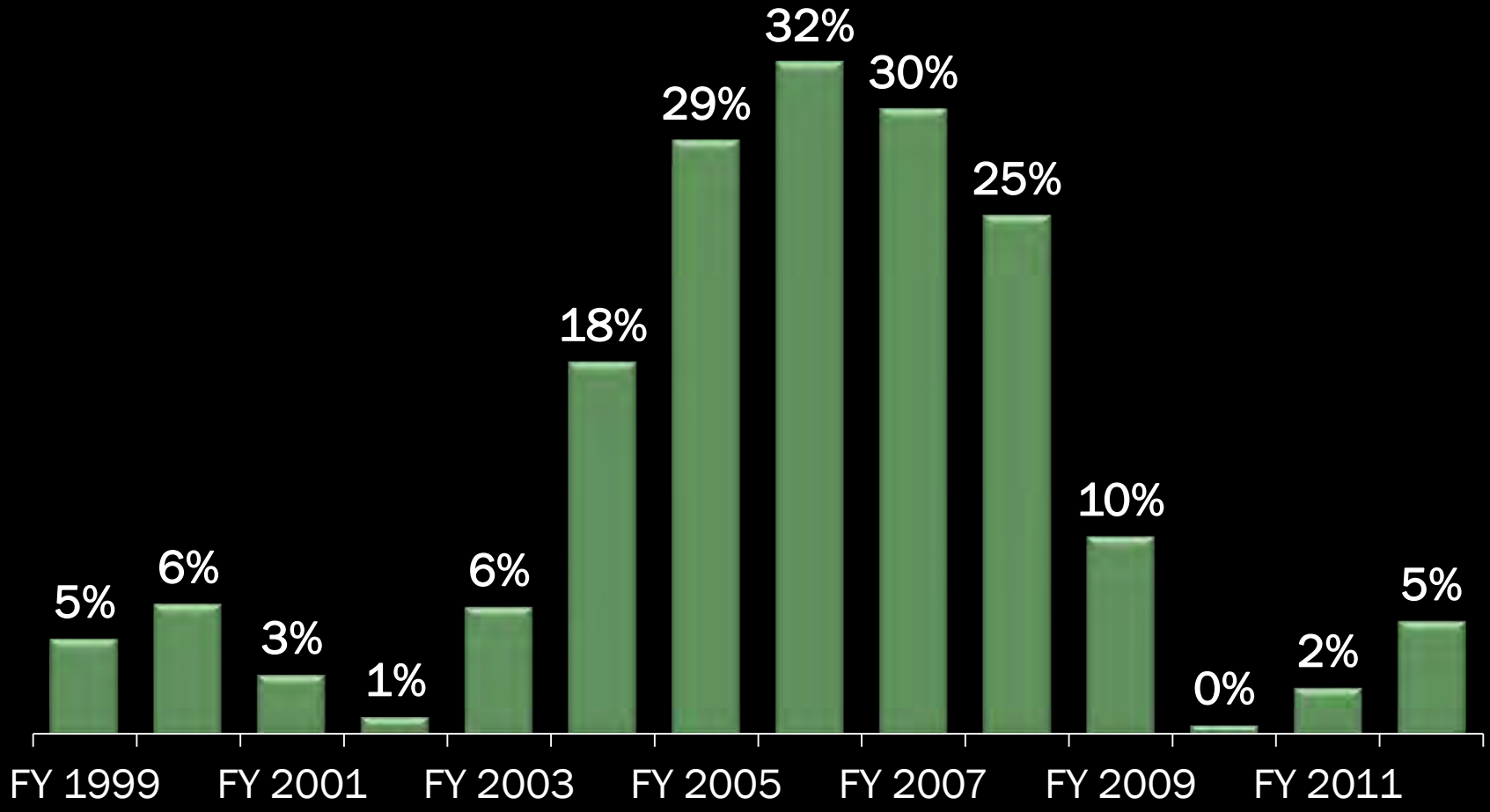
Share of C-Tax Distributed as Excess



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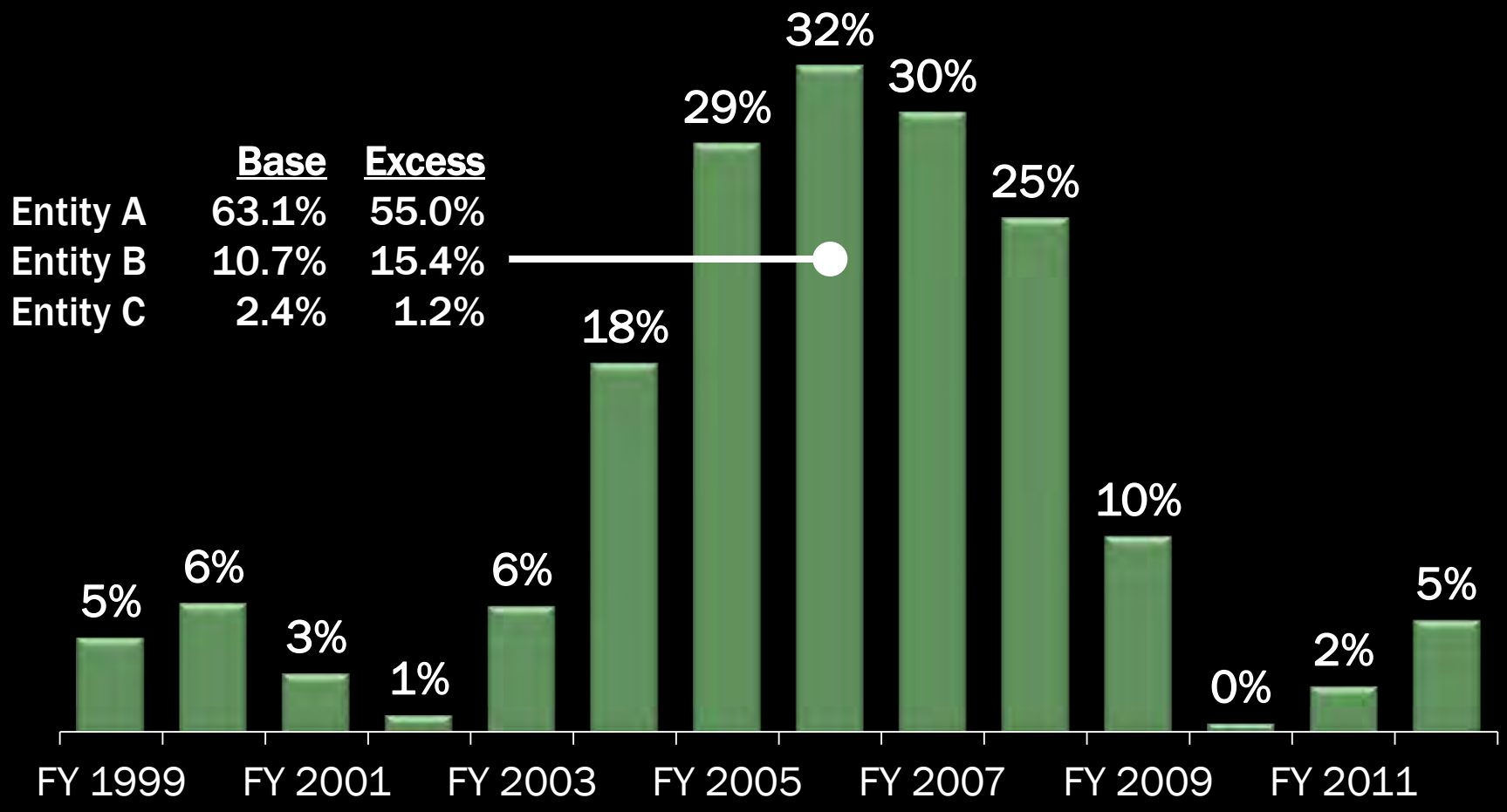


Potential Solution

Modify C-Tax distribution formula such that the prior year's actual allocation becomes the tax base for the subsequent year

Issue #2

Excess Distribution Growth Factors

(Average Change in Population Last 5 Years + Average Change in Assessed Value Last 5 Years)

X

Tax Base

=

Excess Allocation Share

(Average Change in Population Last 5 Years

+

Average Change in Assessed Value Last 5 Years)

X

Tax Base

=

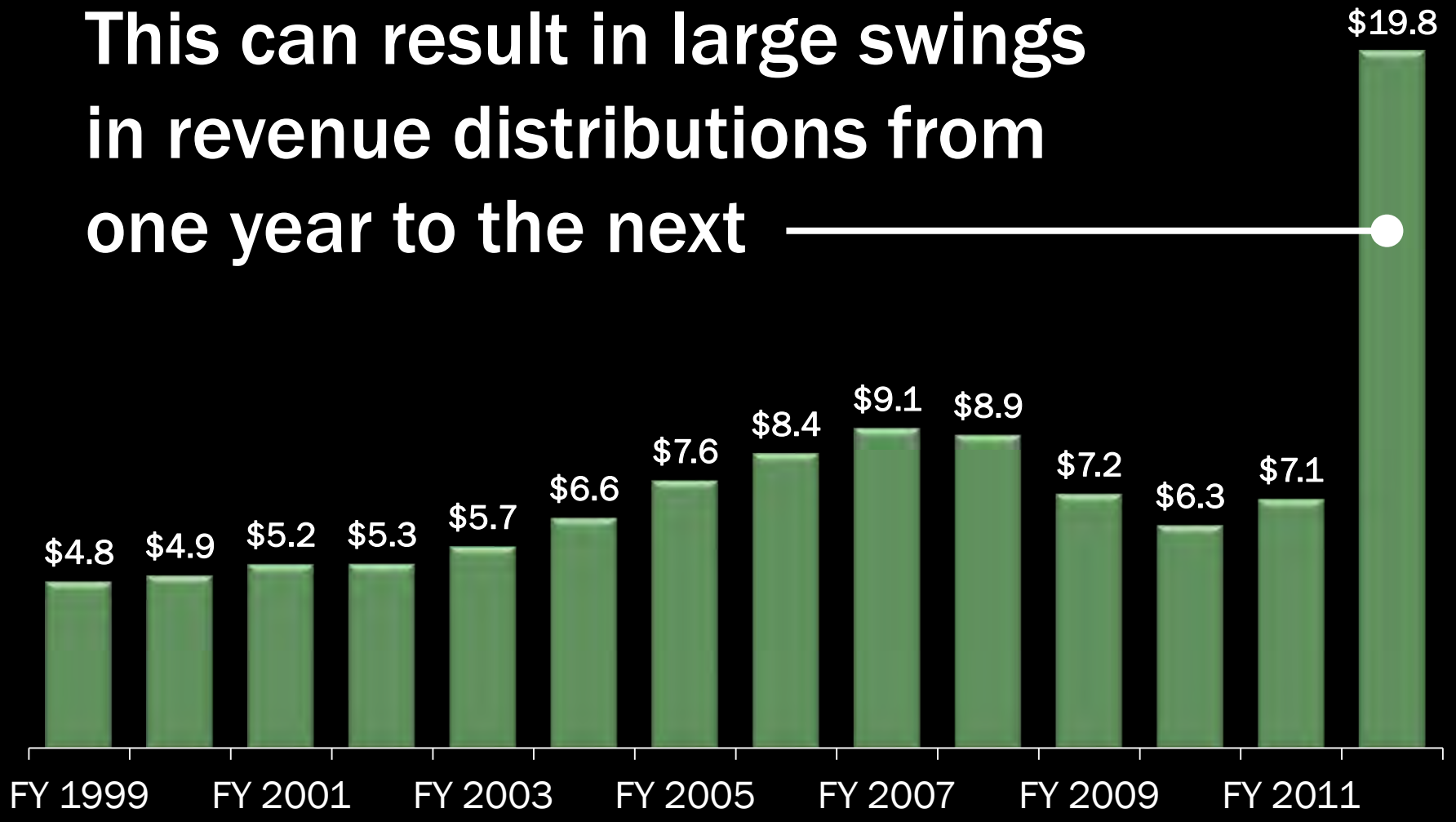
Excess Allocation Share

Note:
The combined result cannot be less than 0

Jurisdiction	% Change in AV
Carson City	-18.9%
Fallon	-28.4%
Clark County	-49.1%
North Las Vegas	-51.8%
Henderson Library District	-46.5%
Gardnerville	-26.3%
Lyon County	-28.2%
Fernley	-39.4%
Washoe County	-28.5%
Sparks	-29.6%

Sharp Declines in Assessed Value are Weighing Down the Formula, Even Where Population Growth is Present and Excess is Being Generated

This can result in large swings in revenue distributions from one year to the next



Potential Solution

Integrate independent “hold harmless” provisions into the excess formula whereby the population growth factor cannot be less than zero AND the assessed valuation factor cannot be less than zero; those “held harmless” factors are then combined and applied to each local government and special district’s base to determine the excess allocation

Issue #3

Plus Factor

One-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	1.0+	109.0%	51.4%
ENTITY B	$1,000,000	1.0%	2.0%	1.0+	103.0%	48.6%

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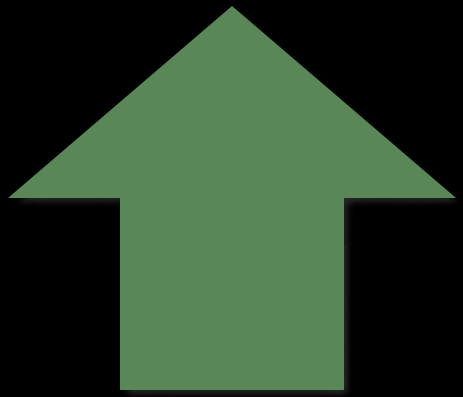

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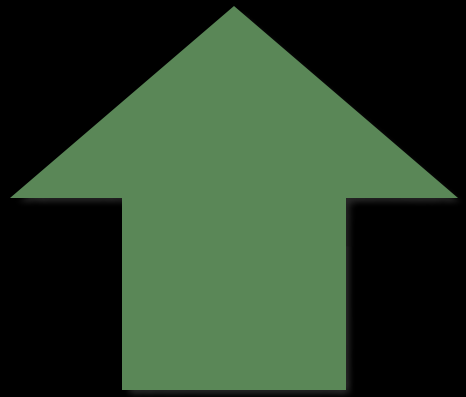

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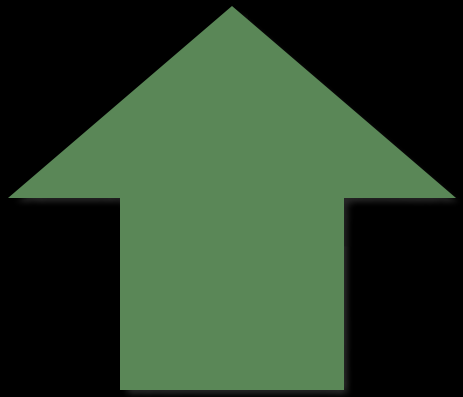

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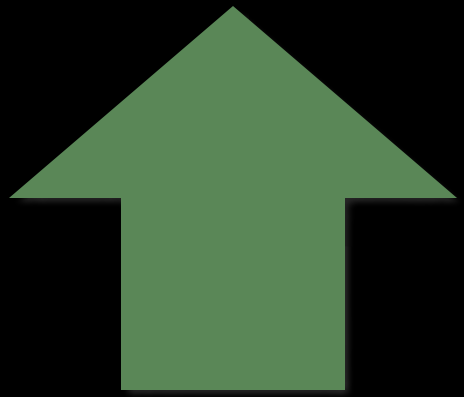

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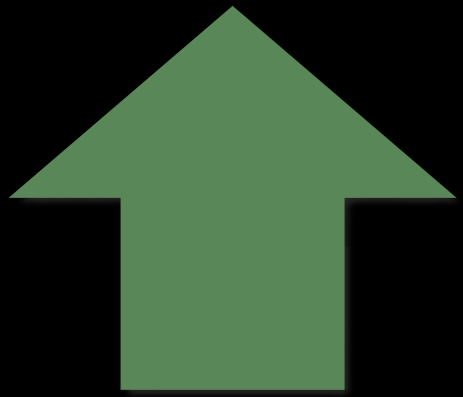

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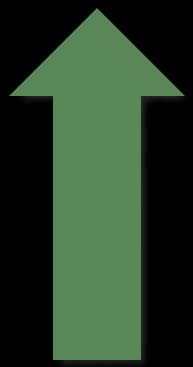

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ENTITY B	$1,000,000	1.0%	2.0%	0.0+	3.0%	25.0%

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The “No-Plus” Dilemma

No-Plus, No-Growth

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ENTITY A	$1,000,000	-1.0%	-2.0%	0.0+	0.0%	0.0%
ENTITY B	$1,000,000	-2.0%	-4.0%	0.0+	0.0%	0.0%
ENTITY C	$1,000,000	-3.0%	-6.0%	0.0+	0.0%	0.0%
ENTITY D	$1,000,000	-4.0%	-8.0%	0.0+	0.0%	0.0%
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No-Plus, One Entity Grows

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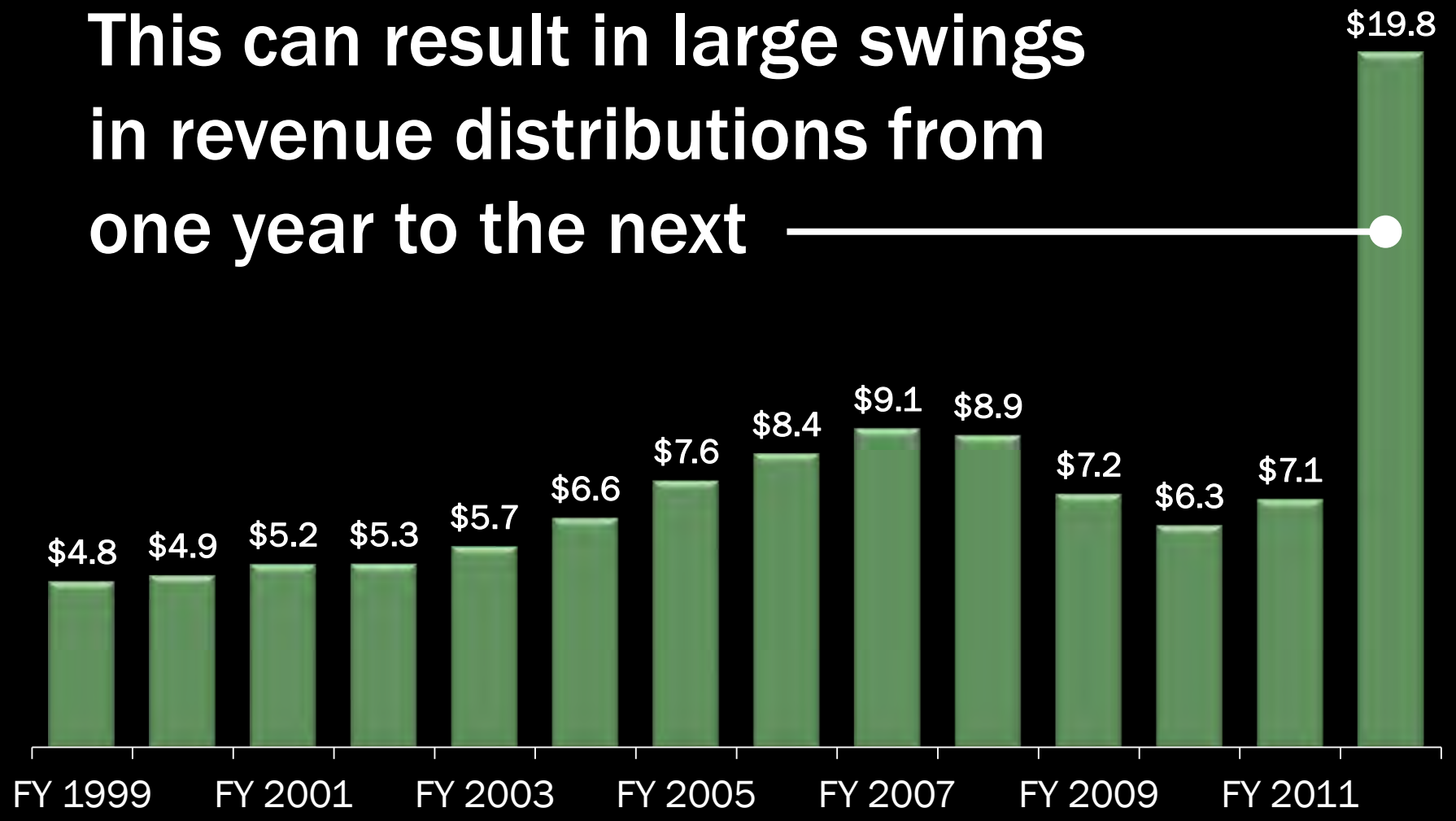
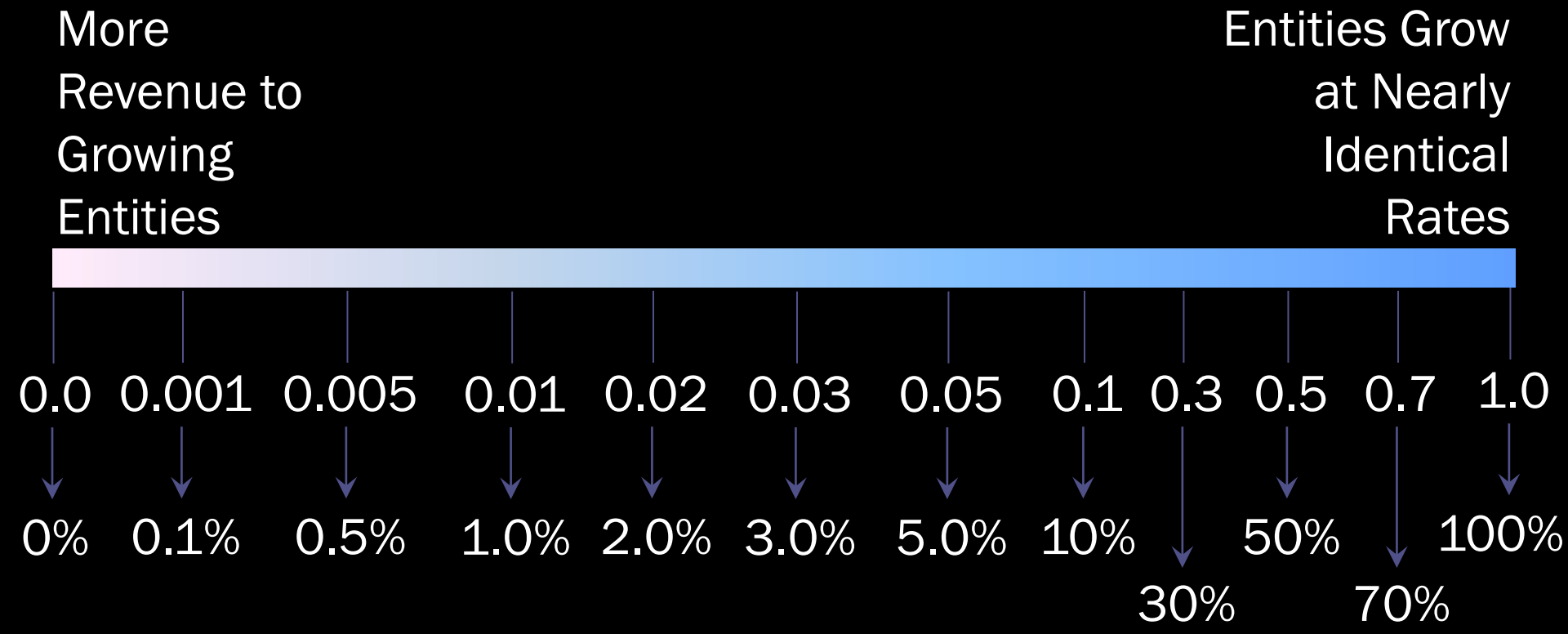


The Plus Factor Spectrum

More Revenue to Growing Entities

Entities Grow at Nearly Identical Rates

The Plus Factor Spectrum



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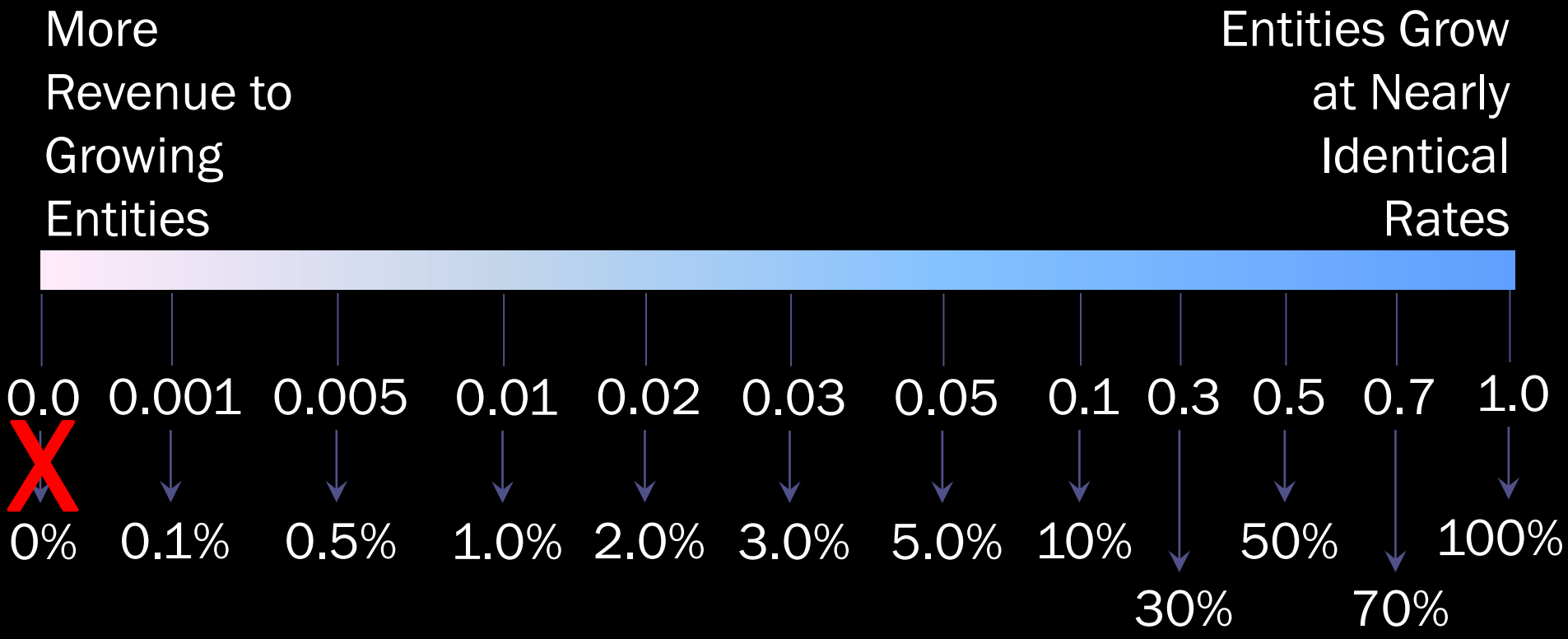

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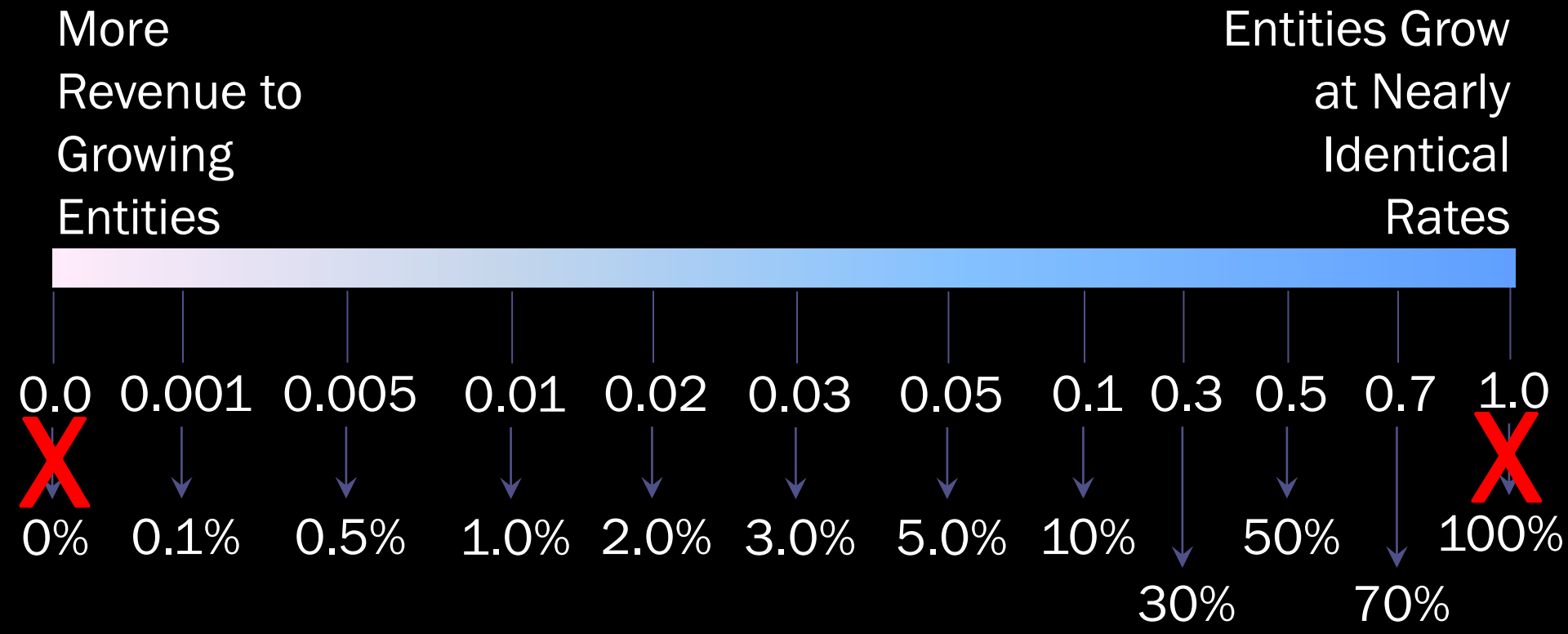

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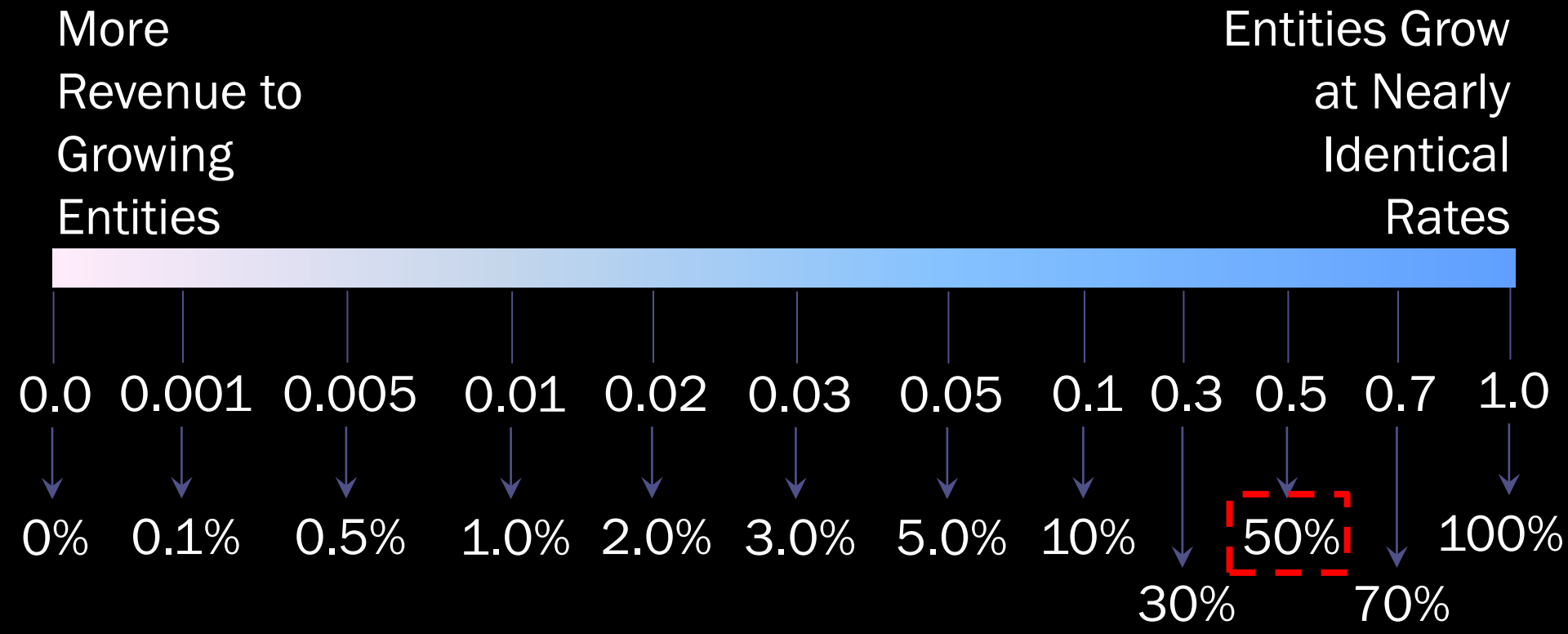


One-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	1.0+	109.0%	51.4%
ENTITY B	$1,000,000	1.0%	2.0%	1.0+	103.0%	48.6%

One-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	1.0+	109.0%	51.4%
ENTITY B	$1,000,000	1.0%	2.0%	1.0+	103.0%	48.6%

0.50-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	0.50+	59.0%	52.7%
ENTITY B	$1,000,000	1.0%	2.0%	0.50+	53.0%	47.3%

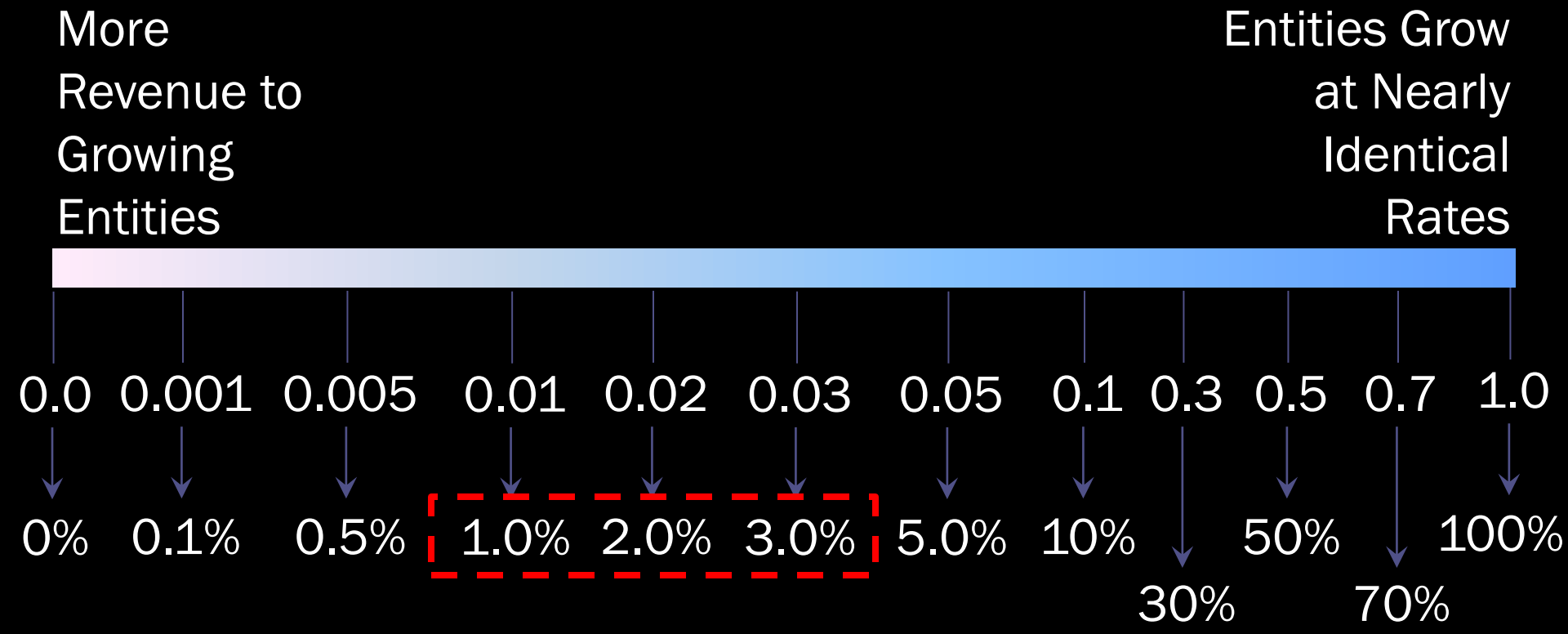
One-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	1.0+	109.0%	51.4%
ENTITY B	$1,000,000	1.0%	2.0%	1.0+	103.0%	48.6%

0.50-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	0.50+	59.0%	52.7%
ENTITY B	$1,000,000	1.0%	2.0%	0.50+	53.0%	47.3%

The Plus Factor Spectrum



0.01-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	0.01+	10.0%	71.4%
ENTITY B	$1,000,000	1.0%	2.0%	0.01+	4.0%	28.6%

0.03-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	0.03+	12.0%	66.7%
ENTITY B	$1,000,000	1.0%	2.0%	0.03+	6.0%	33.3%

0.01-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	0.01+	10.0%	71.4%
ENTITY B	$1,000,000	1.0%	2.0%	0.01+	4.0%	28.6%

0.03-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	0.03+	12.0%	66.7%
ENTITY B	$1,000,000	1.0%	2.0%	0.03+	6.0%	33.3%

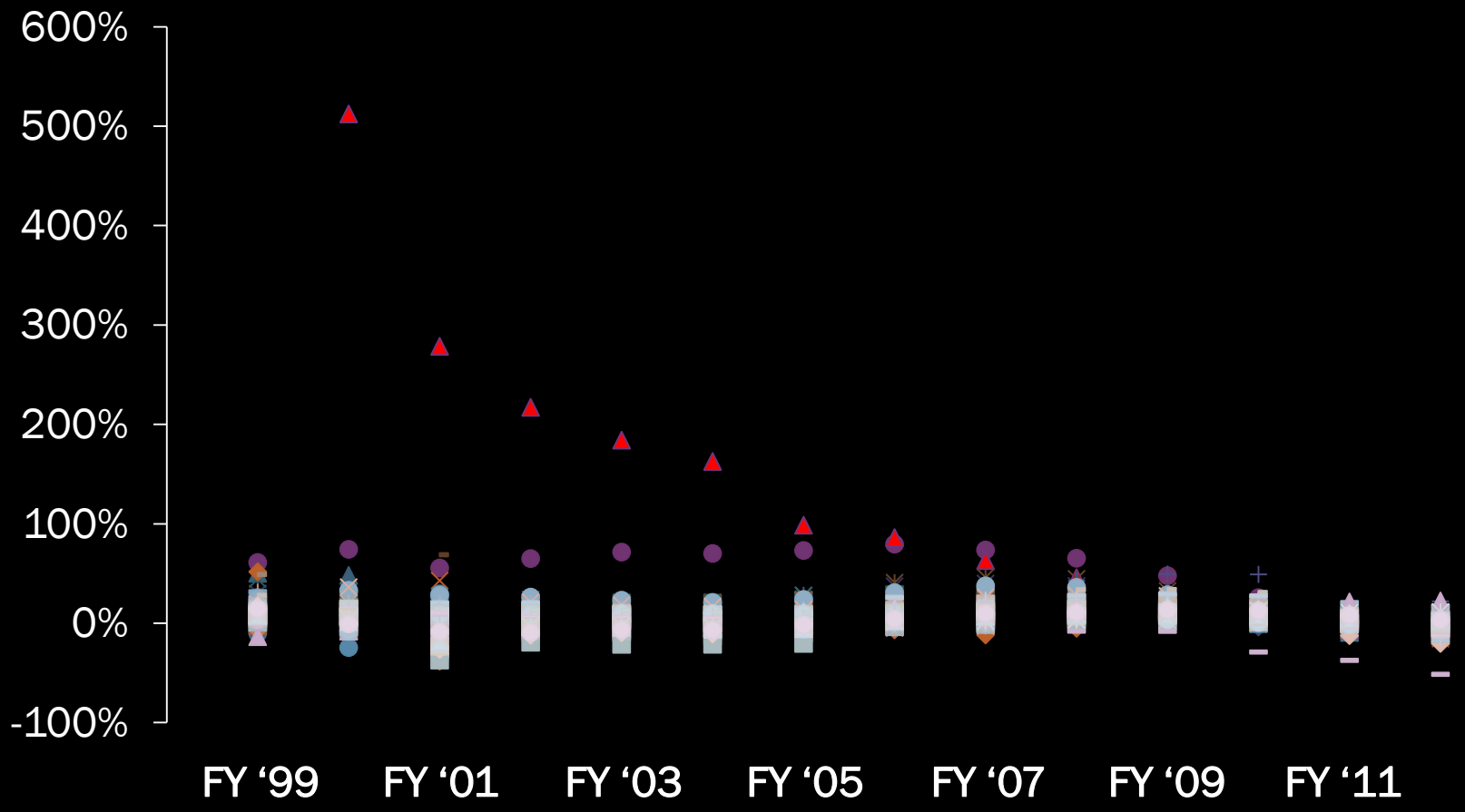
0.01-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	0.01+	10.0%	71.4%
ENTITY B	$1,000,000	1.0%	2.0%	0.01+	4.0%	28.6%

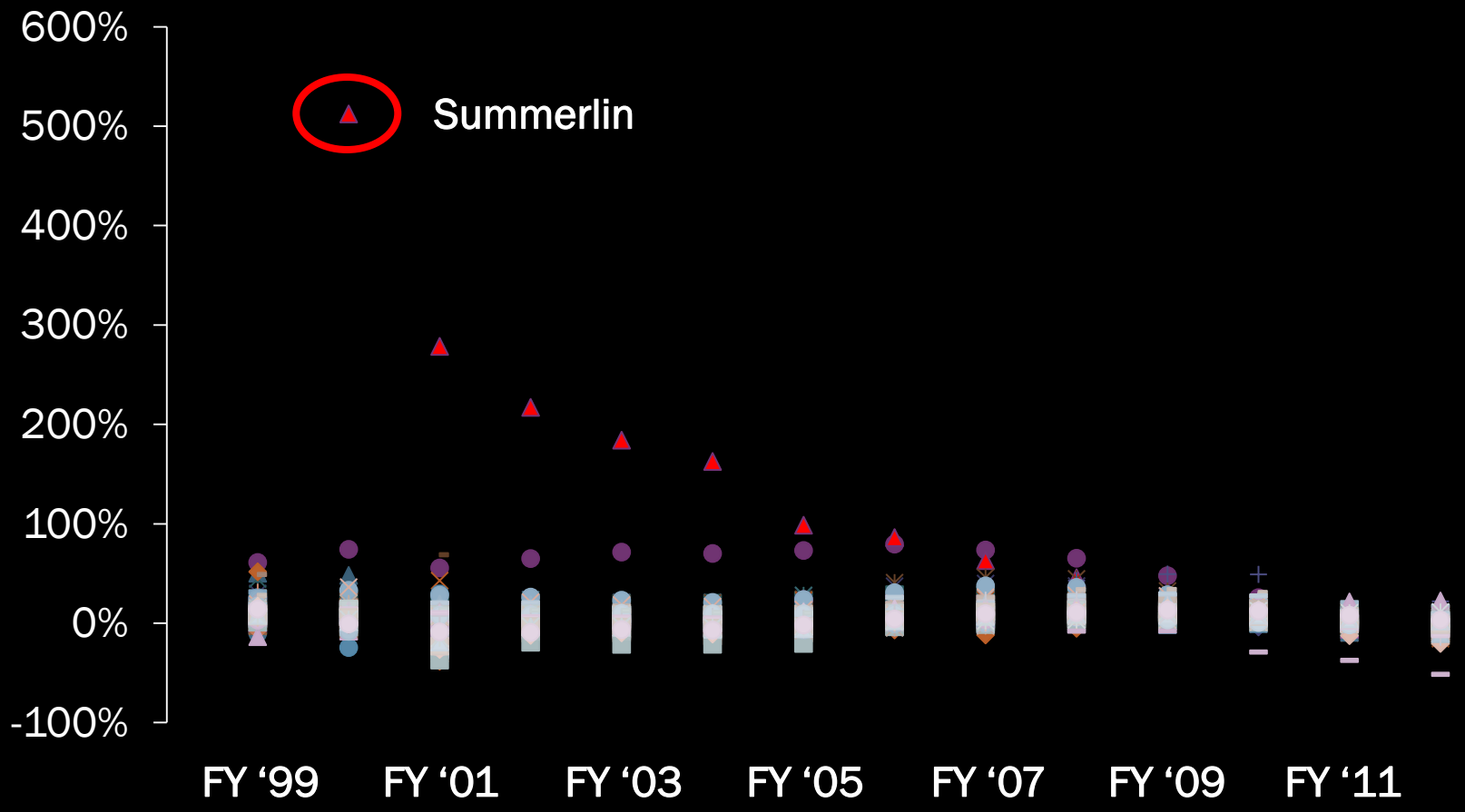
0.03-Plus Excess Calculation

	BASE	GROWTH FACTORS				SHARE OF EXCESS
		POPULATION	A.V.	"PLUS"	COMBINED	
ENTITY A	$1,000,000	3.0%	6.0%	0.03+	12.0%	66.7%
ENTITY B	$1,000,000	1.0%	2.0%	0.03+	6.0%	33.3%

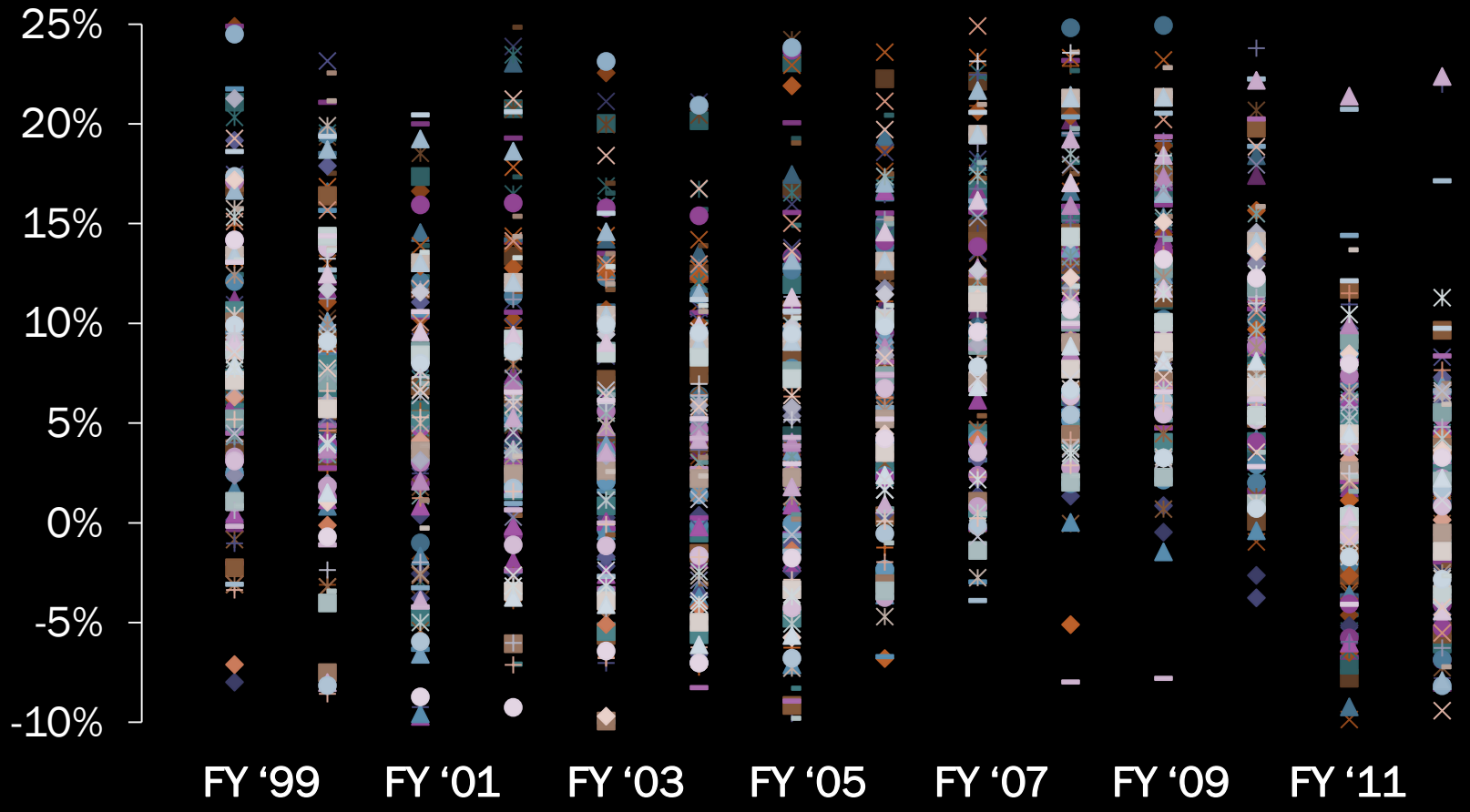
Historical Growth Factors, Prior to Adding 1+
FY 1999 – FY 2012



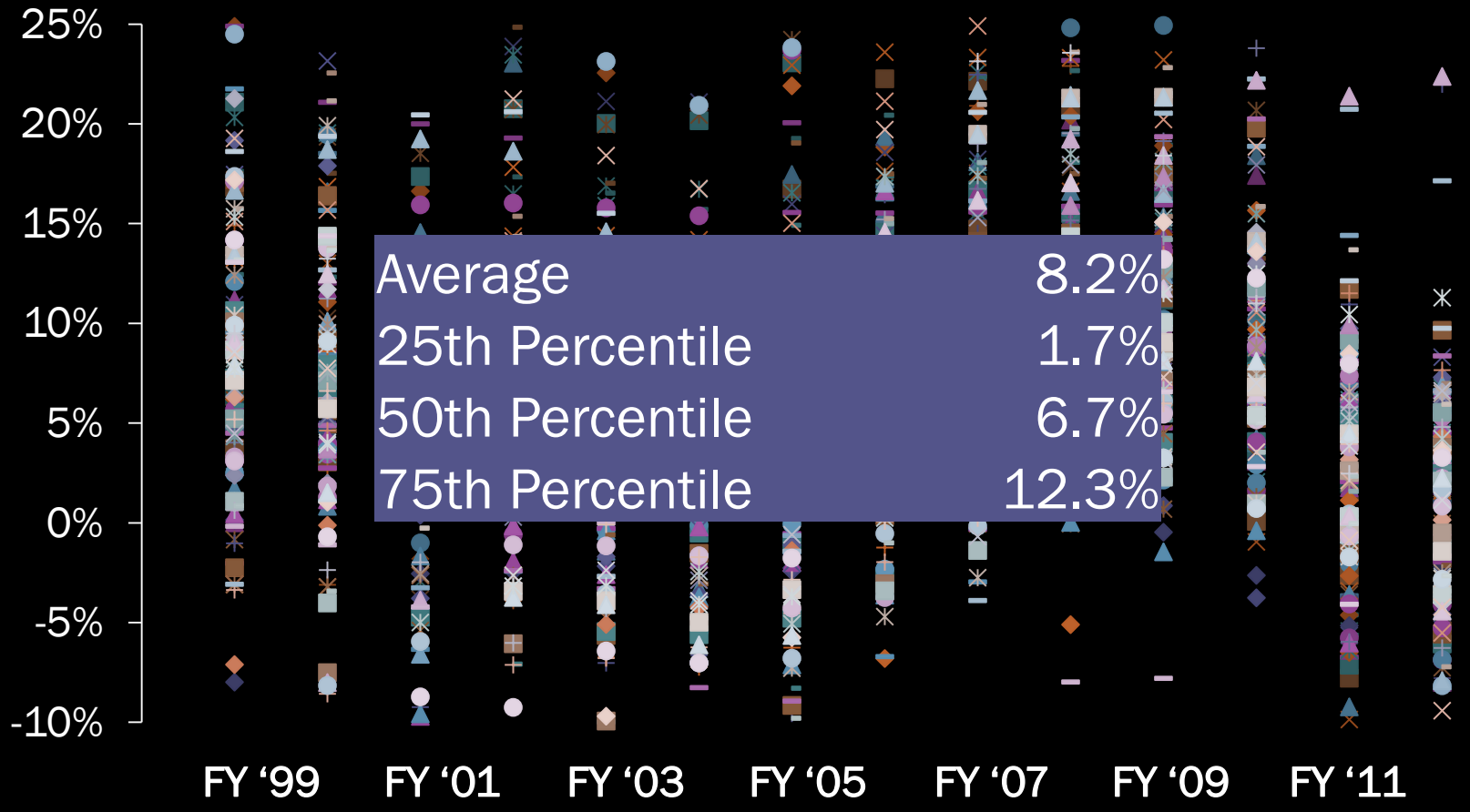
Historical Growth Factors, Prior to Adding 1+
FY 1999 – FY 2012



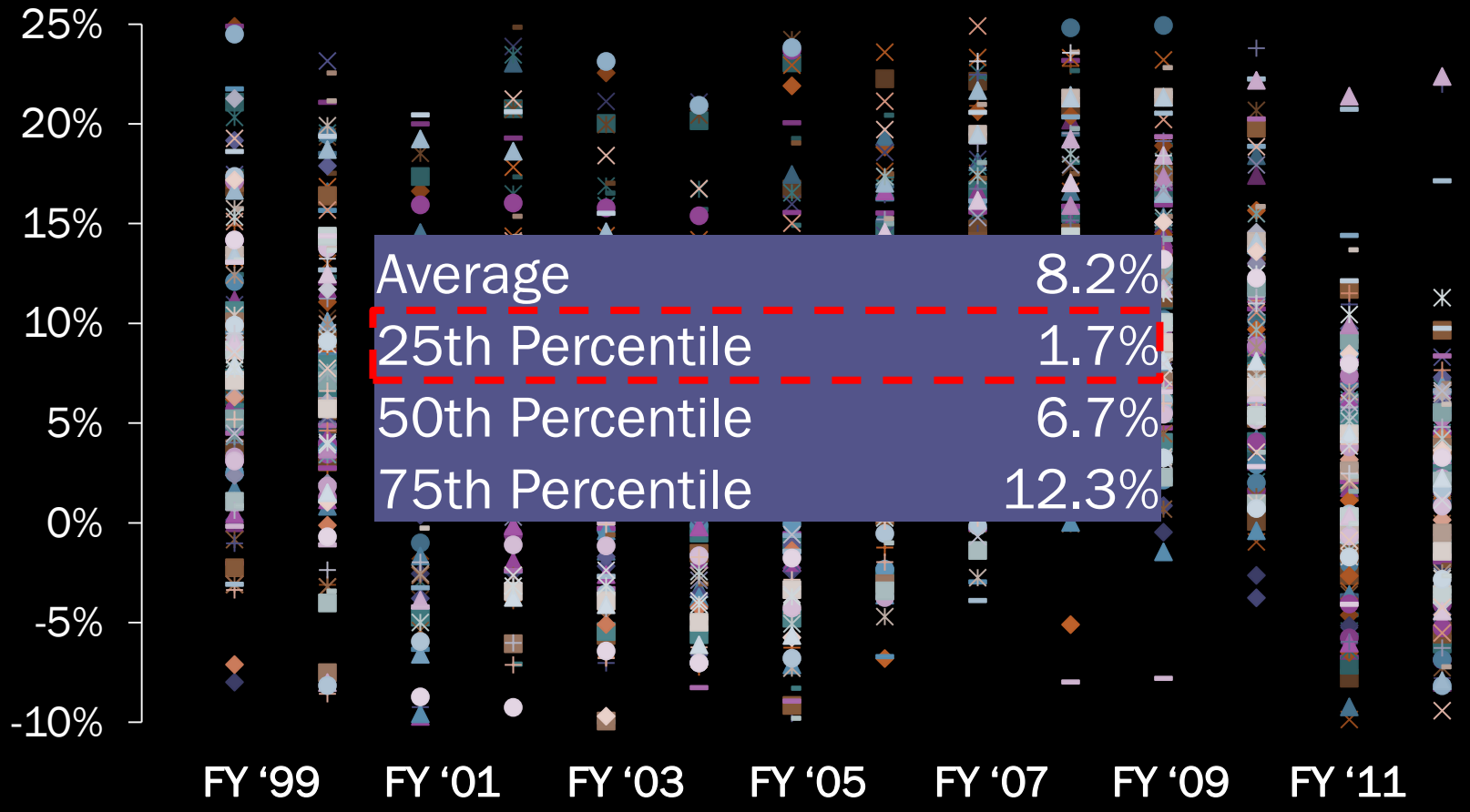
Historical Growth Factors, Prior to Adding 1+
FY 1999 – FY 2012



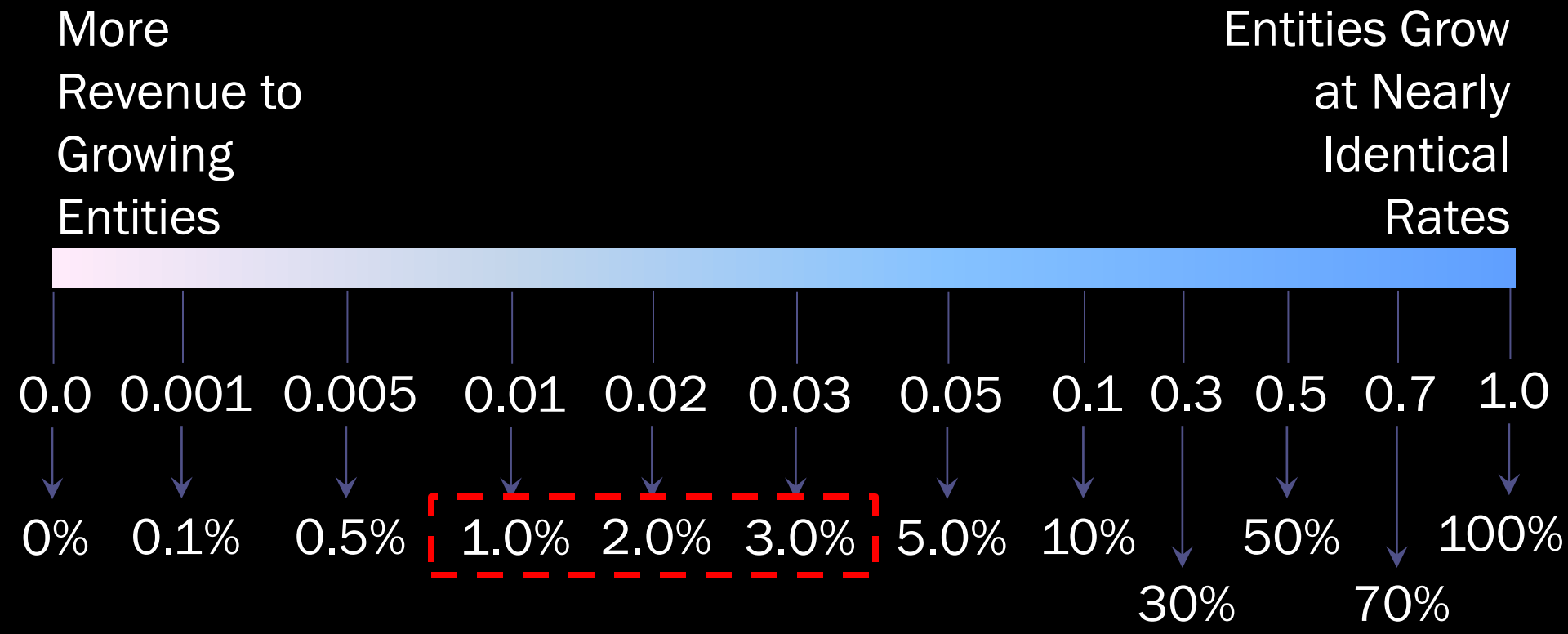
Historical Growth Factors, Prior to Adding 1+
FY 1999 – FY 2012



Historical Growth Factors, Prior to Adding 1+
FY 1999 – FY 2012



The Plus Factor Spectrum



Rurals and One Plus

Potential Solution

Adjust the C-Tax excess calculation to include a “plus” factor that approximates a modest rate of population and assessed value growth, balancing the need for system stability while increasing the nexus between revenue growth and community growth

Issue #4

Circuit Breaker

Potential Solution

C-Tax formula will revert back the prior year's distribution share in the event the formula breaks down

Potential Solution

C-Tax formula will revert back the prior year's distribution share in the event the formula breaks down

Impact Assessment

Impact Assessment

1. Slower-growing jurisdictions have base adjustments that reflect inflation and share modestly in incremental, growth revenues

2. Faster-growing jurisdictions benefit from a greater share of incremental, growth revenues which are added to their base each year; base adjustments reflect changes in community, and protect against disproportionate declines when revenues fall

Impact Assessment

3. Special districts, benefit by eliminating their sole dependence on assessed value growth to participate in excess distributions

4. Rural and urban areas are treated similarly, respecting the ability for individual counties to modify their particular distribution through a Memorandum of Understanding (MOU)

Issues Outstanding

Outstanding Issues

1. Vetting of alternatives among a wider range of local governments (other ideas)
2. What happens in the event a local government enters a longer-run period of decline?
3. When does the circuit-breaker kick in? How long does it last?
4. What happens in the event a new local government is formed?
5. Should the hold harmless factor be applied to both AV and population growth rates?

Outstanding Issues

6. Are there administrative challenges created for the Department of Taxation?
7. What year becomes the new base year (start year) for the revised C-Tax calculation?
8. What are the implications for libraries?
9. Where does the final plus factor land?
10. Is the CPI the right index for annual base adjustments? What happens in the event of hyper-inflation?

Nevada's Consolidated Tax

A Review and Analysis of Alternatives

APPLIED ANALYSIS