

THE IMPACT OF RATE REGULATION ON CLAIMS

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AGENDA



- A short trip through the paper and results
- A post-script regarding the impact of rate regulatory reforms
- Insurance Fraud Bureau of Massachusetts
 - The Community Insurance Fraud Initiative (CIFI)
Ten Year Retrospective 2003-2013

Thesis



- Stringent regulation of insurance rates produces unintended effects:
 - Reduced competition
 - Distorted insurance demand
 - Distorted safety and claiming incentives

- Many of the unintended effects create upward pressure on loss costs and premiums
 - In extreme cases, outcomes may even be contrary to the regulatory objectives pursued

Unintended Effects: Supply

- *Rate suppression* distorts insurance supply
 - ▣ Decreased writing of voluntary coverage
 - ▣ Reduced innovation and quality of service
 - ▣ Reduced entry of firms
 - ▣ Increased exit of firms

- *Rate uncertainty* distorts insurance supply
 - ▣ All of the above effects
 - ▣ Price stickiness and market volatility

Unintended Effects: Demand

- Rate subsidies distort consumer behavior:
 - Insurance demand
 - Increased demand from high risk consumers
 - Decreased demand from low risk consumers
 - Safety incentives are reduced
 - Prices are less responsive to changes in losses/risk
 - Claiming incentives are increased
 - Prices are less responsive to changes in losses/risk

Evidence from Massachusetts



- State regulation of private passenger auto insurance rates created widely-recognized market problems
 - Exit of insurance providers, especially national firms
 - Small number of suppliers
 - Larger than normal residual market
 - Cost inefficiencies
 - Politicized ratemaking environment

- *Less recognized problem:* In the aggregate, regulation drives overall claims costs higher

Table 1
Major Regulatory Changes, 1970-2000
Massachusetts Private Passenger Automobile Insurance

Year	Regulation
1971	Nofault auto insurance effective
1975	State rate-setting extended to all auto coverages
1977	Competitive rate-setting allowed
1978	State rate-setting reinstated
1989	Automobile Insurance Reform Law effective
1991	Insurance Fraud Bureau began operation
1996	Competitive Discounts and Deviations begin at -7.4%
2006	Competitive Discounts and Deviations stabilize at -1.7%
2007	Competitive rate-setting allowed 4/1/08

Table 2**Direction of Subsidies by Driver Class and Territory Compulsory Insurance Coverage
2004**

		Experienced Classes	Inexperienced Classes	Business Classes
Non-Boston Territories	Average Premium	\$527.15	\$1,220.54	\$500.67
	Average Subsidy	-\$26.00	\$138.29	-\$46.43
	Cells Subsidized (%)	12.50%	42.71%	6.25%
Boston Territories	Average Premium	\$813.33	\$1,434.04	\$751.98
	Average Subsidy	\$253.77	\$520.09	\$32.30
	Cells Subsidized (%)	64.65%	72.73%	36.36%

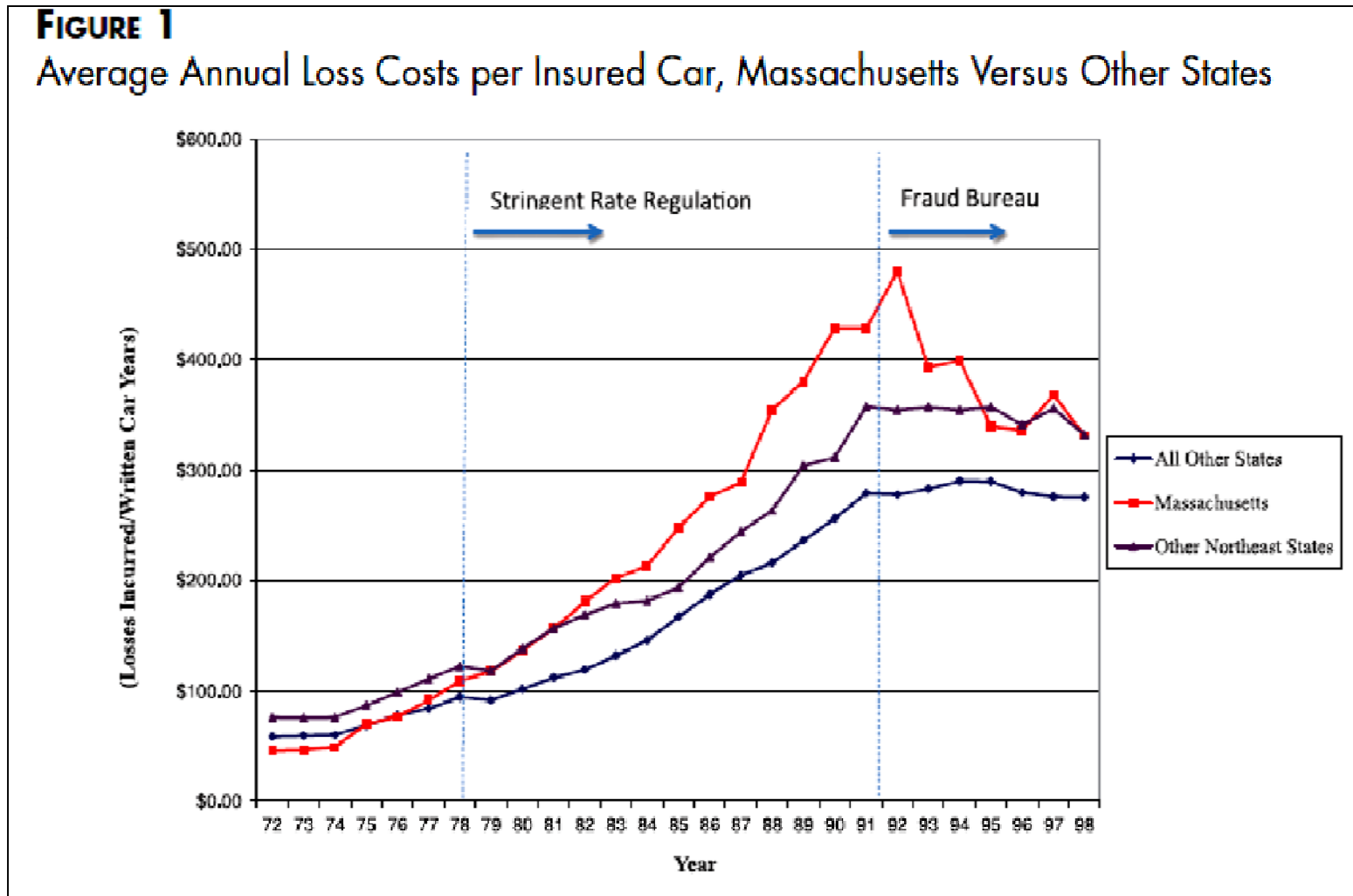
Impact of Rate Regulation on Claims



- First Cut: State-level data on average loss costs
 - 50 states
 - 1972-1998 (before and after Massachusetts effective subsidies)

- Hypothesis: Massachusetts' loss costs will be higher than otherwise predicted during period of stringent regulation

Average Auto Loss Costs in Massachusetts versus Other States



State by State Estimation



DATA: 1972- 1998 NAIC State Aggregates

Control for:

Coverage Variations

Demographics

Regulation

METHOD: Panel Data Regression Models

Dependent variable:

$\ln(\text{Liab. Losses per written Car Years})$

State Regression Estimates

$$L_{st} = \beta_0 + \beta_1 CSYears_t + \gamma' X_{st} + \beta_4 StateRegs_{st} + \beta_5 StateRegs_{st} CSYears_t + a_s + T_t + \varepsilon_{st}$$

Estimate identical model specification without MA data or MA interaction term

Apply estimated coefficient vector to Massachusetts variable values, 1972-1998

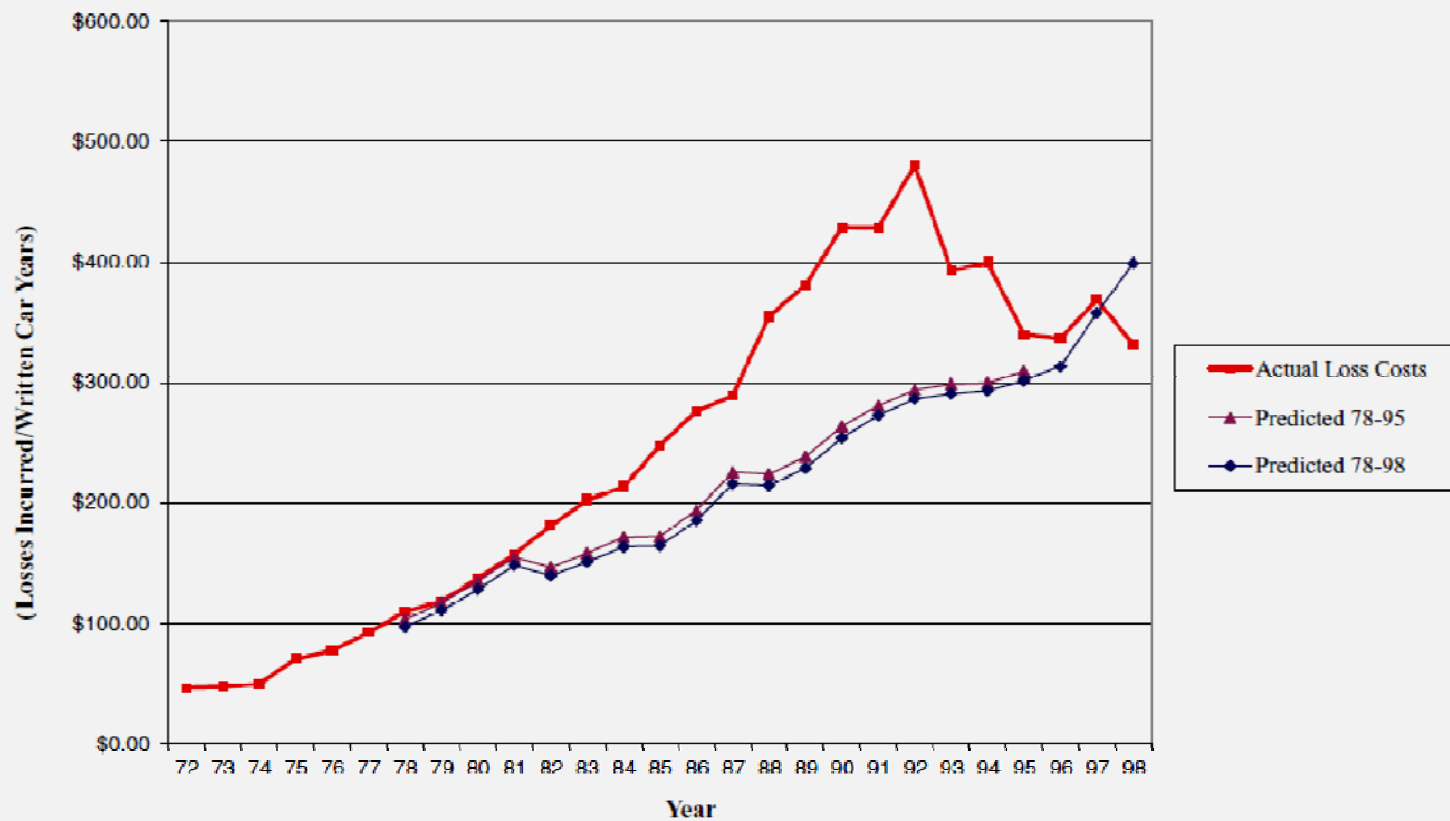
Obtain predicted value of Massachusetts loss costs for each year

Compare Actual – Predicted value

Predicted vs. Actual Loss Costs

FIGURE 2

Estimated Year-by-Year Excess Average Loss Costs, Massachusetts



Impact of Rate Regulation on Claims



- Second cut: Massachusetts town-level data on loss cost levels for 5 coverages
 - 360 towns
 - Biennial data 1999-2007

- Hypothesis: Loss cost growth higher in subsidized towns than in other towns

Town Data

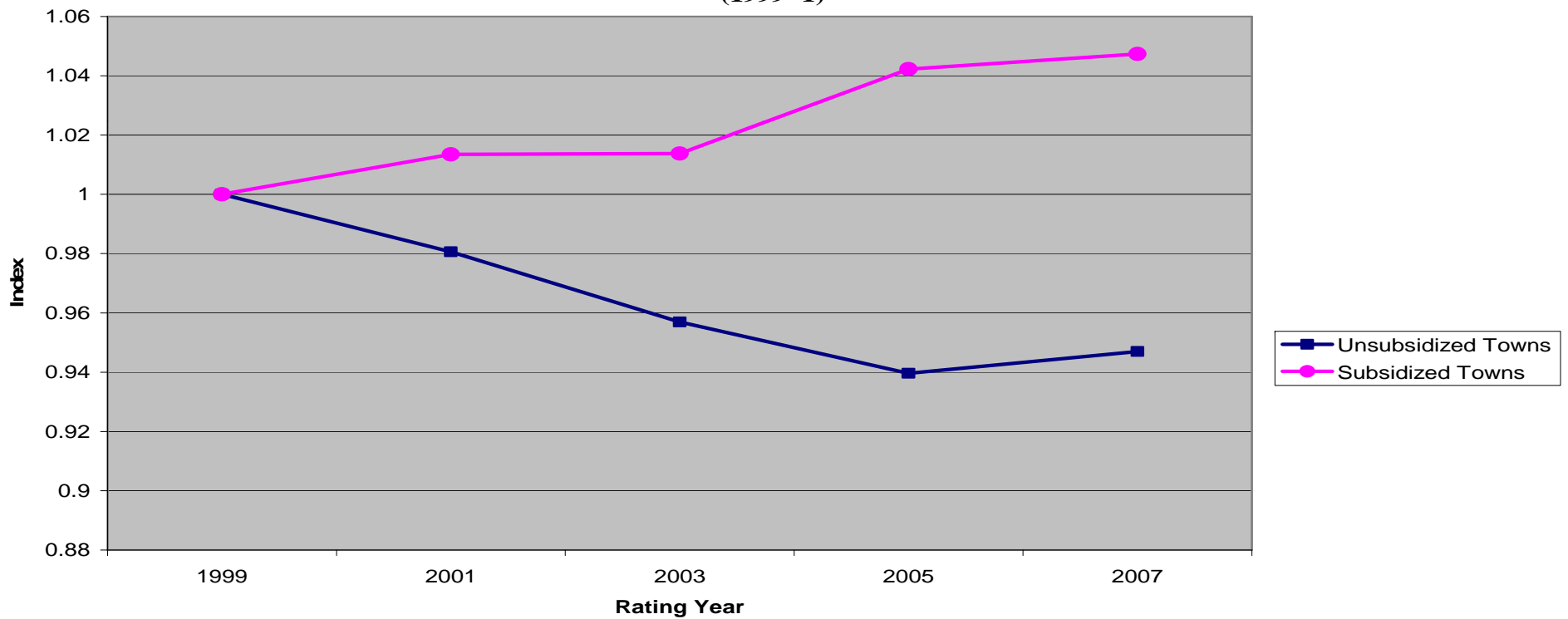


- Panel of Massachusetts town-level data on loss cost indices for 5 coverages from AIB
 - 360 towns
 - Biennial data 1999-2007
 - Pure premium index
 - Average class rating factor

- Subsidy data from AIB

Town Data - BIL

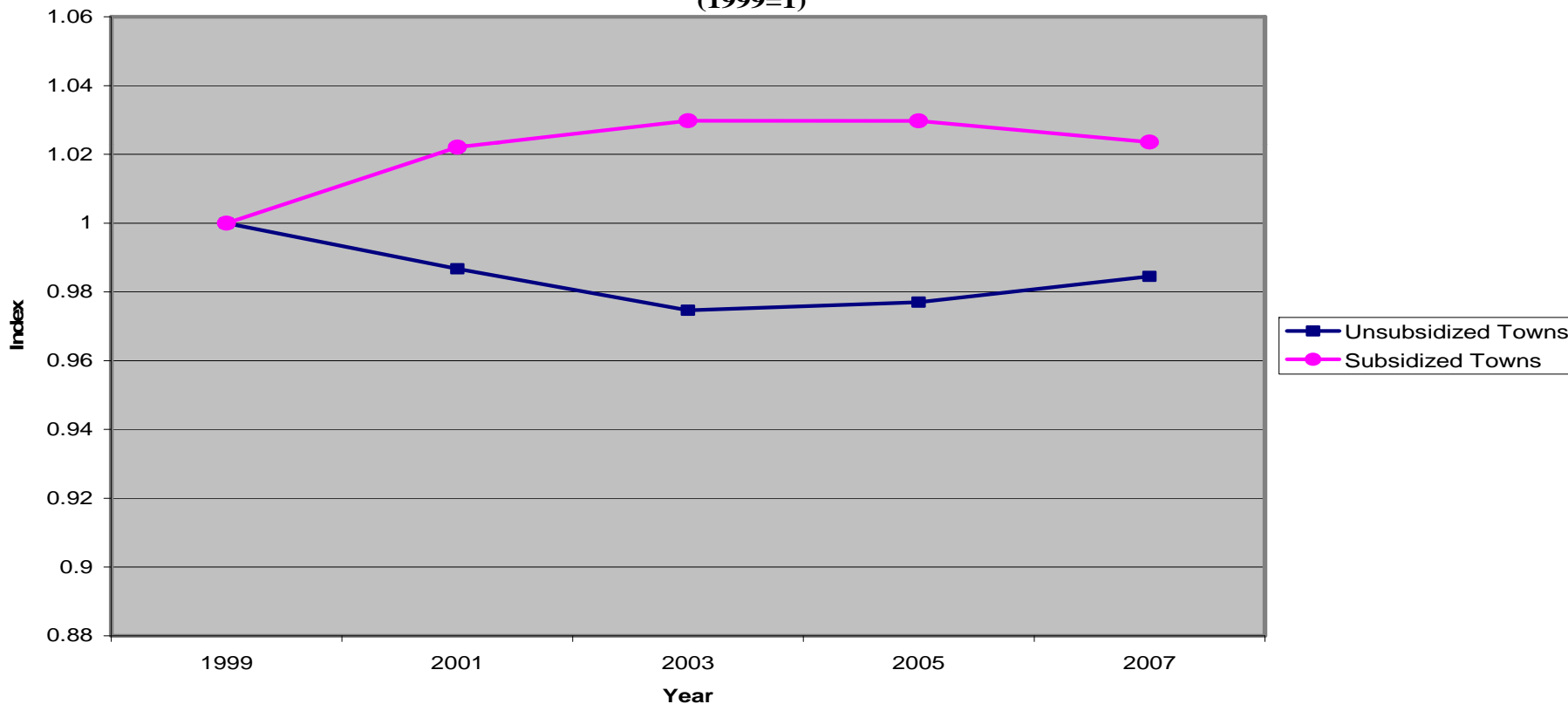
**Figure 2: BIL Pure Premium Index Growth
Subsidized vs Unsubsidized Towns
(1999=1)**



Source: *Automobile Insurers Bureau Filings on Territories and Actuarial Notices on Subsidies*

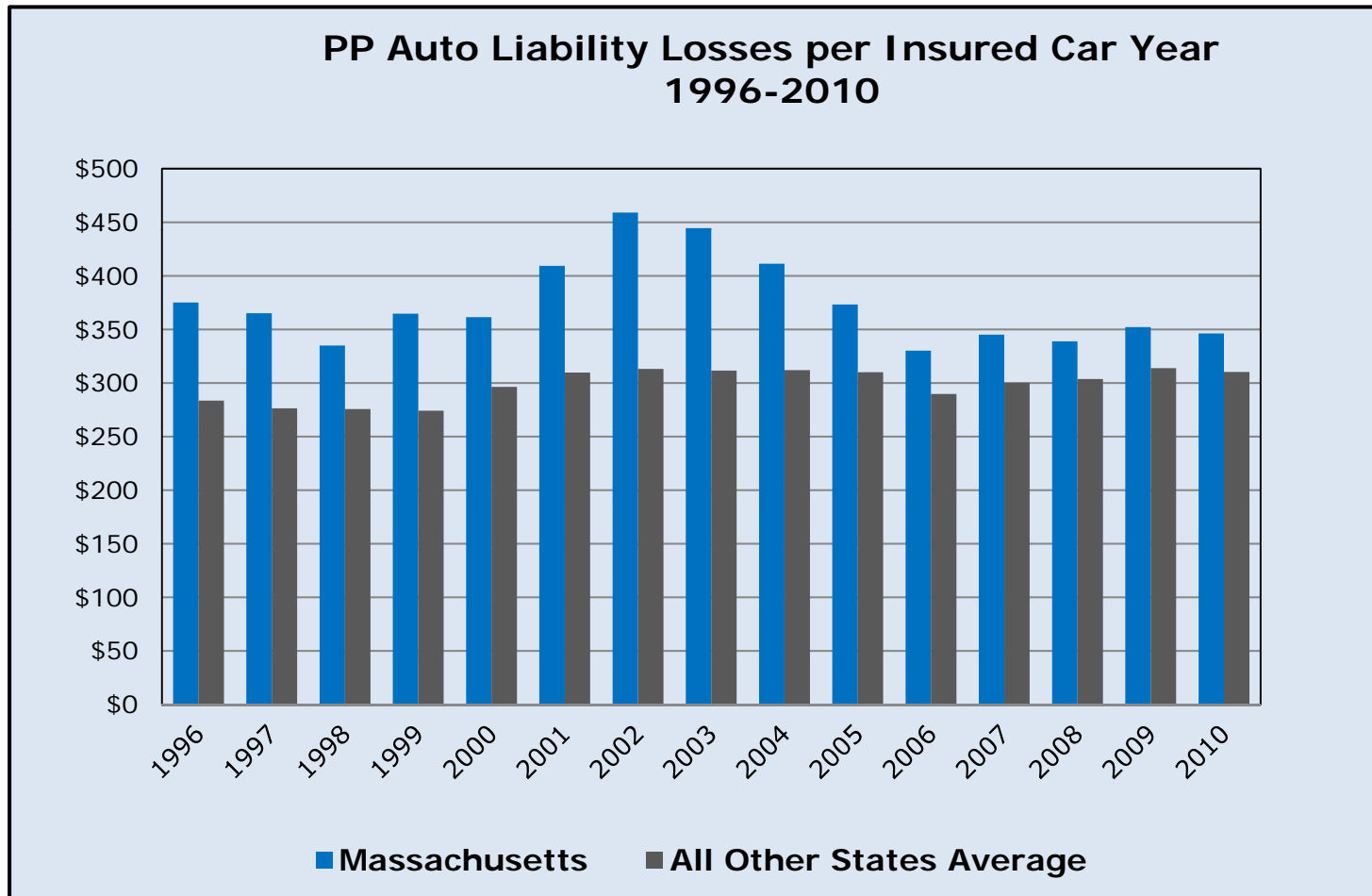
Town Data - PDL

**Figure 3: PDL Pure Premium Index Growth
Subsidized vs Unsubsidized Towns
(1999=1)**

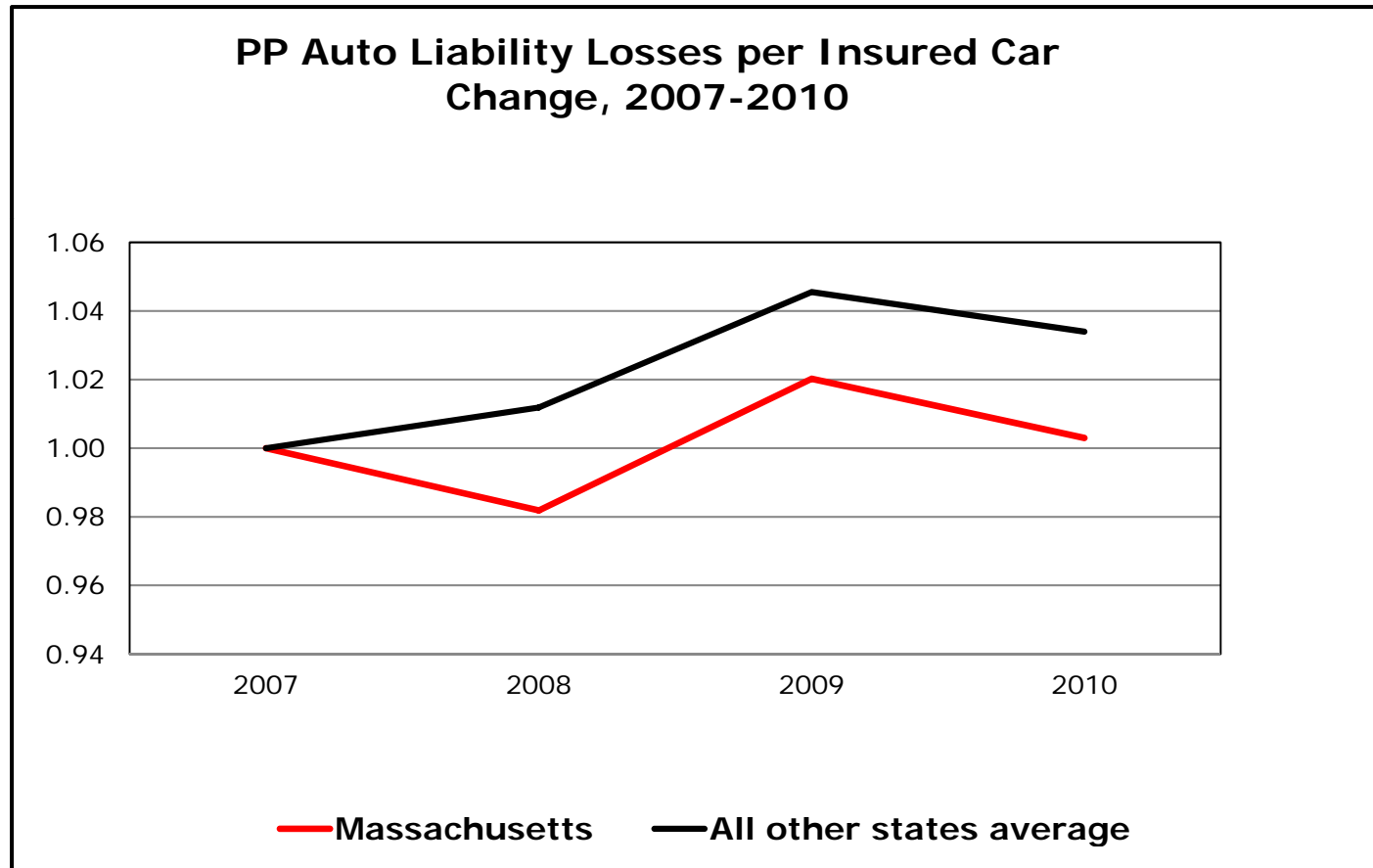


Source: Automobile Insurers Bureau Filings on Territories and Actuarial Notices on Subsidies

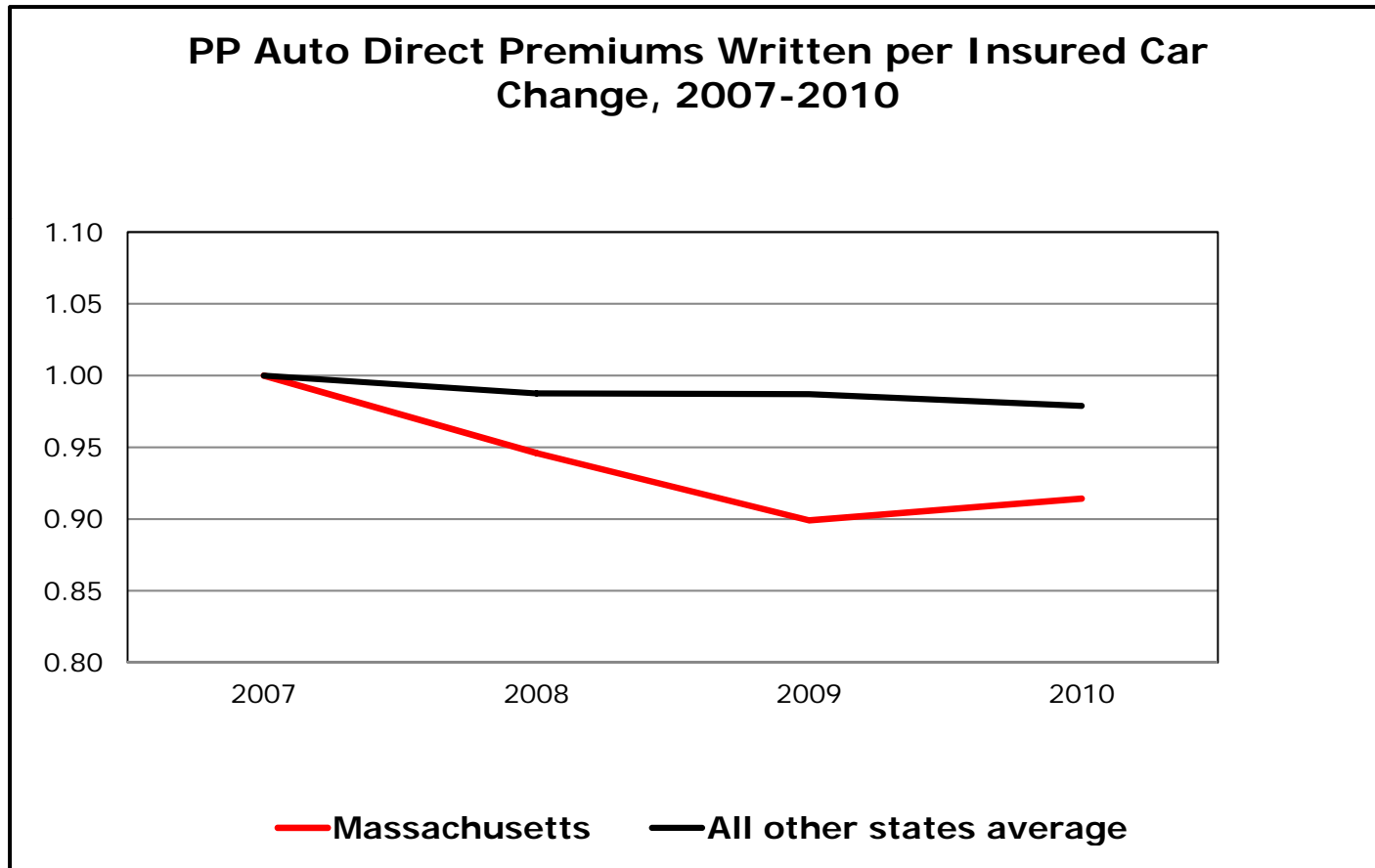
Post-Script: 2008 Regulatory Reforms



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Post-Script: 2008 Regulatory Reforms



CIFI 10 YEAR RETROSPECTIVE



THE COMMUNITY INSURANCE FRAUD INITIATIVE (CIFI) A TEN YEAR RETROSPECTIVE

*A joint report by the Automobile Insurers Bureau of Massachusetts (AIB)
and the Insurance Fraud Bureau of Massachusetts (IFB).*

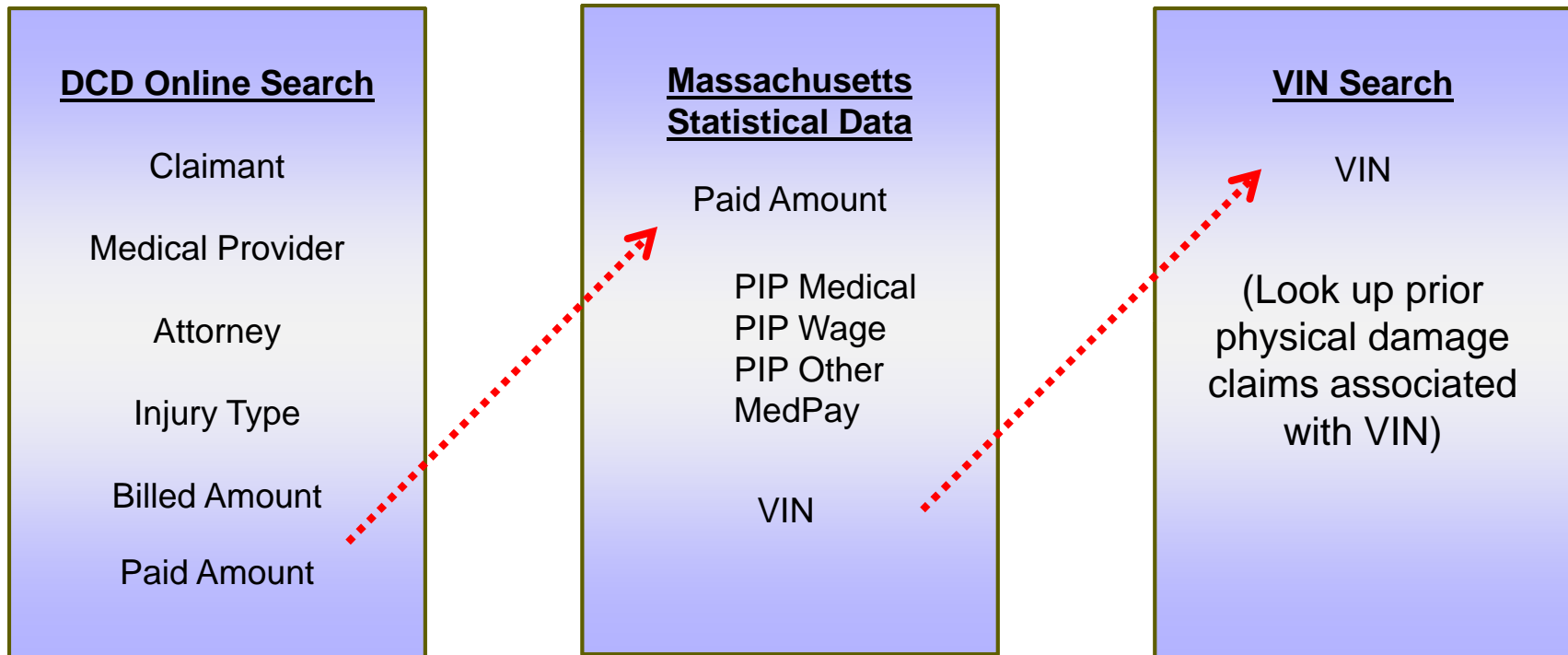
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INTRODUCTION

In 2003, the Insurance Fraud Bureau embarked on a unique program to fight back against an epidemic of insurance fraud, largely in the form of organized staged auto accidents. The program, known as the Community Insurance Fraud Initiative (CIFI), has been well documented in local and national news media and has been widely viewed as a success. Approximately five years after the effort began, we published a report chronicling the genesis of the program, and the success we witnessed.



Claims searches access both DCD and Mass. statistical data.



DETAIL CLAIM DATABASE (DCD)

DCD Facts

- ❑ Contains more than 3 million closed claims
- ❑ Over 139,000 closed injury claims reported in 2012
- ❑ Over 3100 DCD User IDs issued to member companies
- ❑ More than 300 claims searches performed by users online daily
- ❑ Batch Search Request (BSR) automated search program has 70% market participation
- ❑ BSR processes over 600 new open claims each day
- ❑ Approximately 250 users log onto the DCD daily



Key Indicators for Suspicious Claims



- Medical Providers and/or Organizations that bill more than \$100,000 per year.

- Towns with high “Injury claims per accident”.
 - Lawrence Massachusetts: 140 injury claims per 100 property claims

CIFI 10 YEAR RETROSPECTIVE

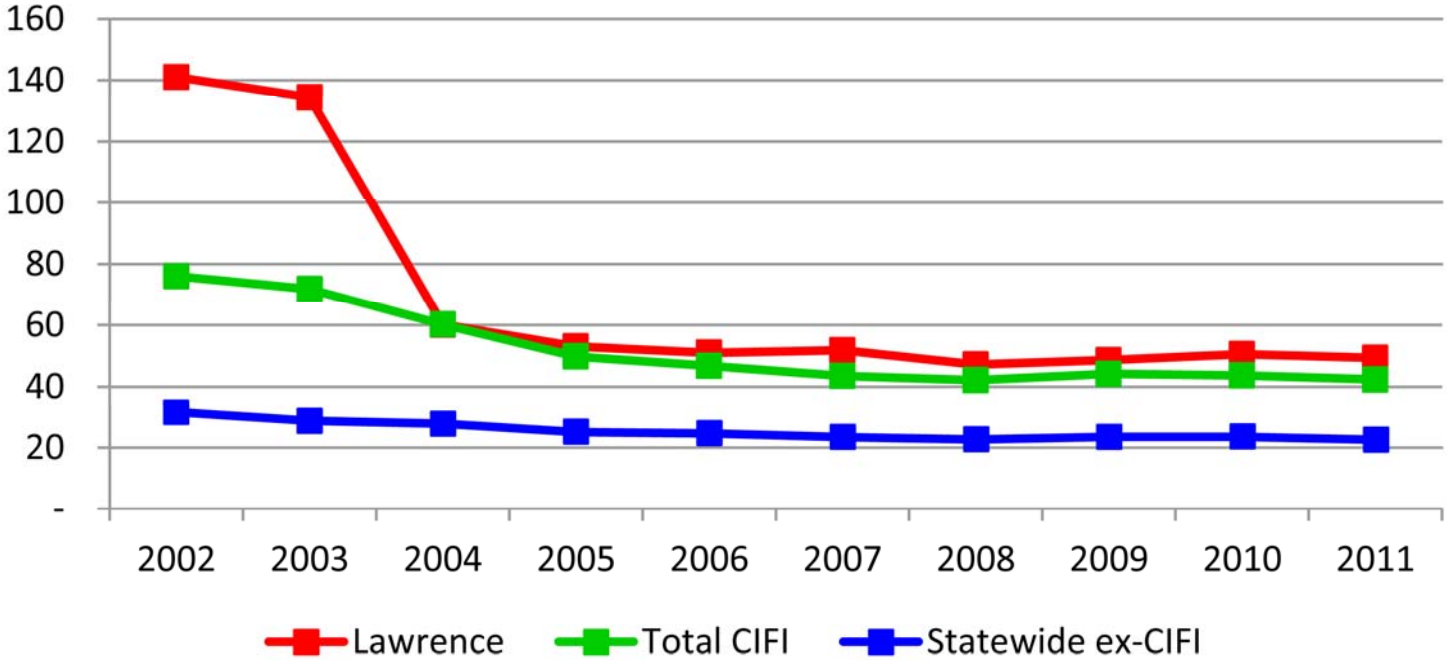
Since the introduction of the CIFI Programs

- People charged with insurance fraud since the introduction of the CIFI programs: **1,917**
- Injury claims per 100 accidents dropped from **76 to 42**
- Attorney involvement in PIP claims dropped from **67% to 41%**
- Total loss savings in CIFI communities (2011 accident year): **\$266M**
- Cumulative premium savings to insureds in CIFI communities: **\$874M**
- Annual savings per insured vehicle in CIFI communities: **\$185**



CIFI 10 YEAR RETROSPECTIVE

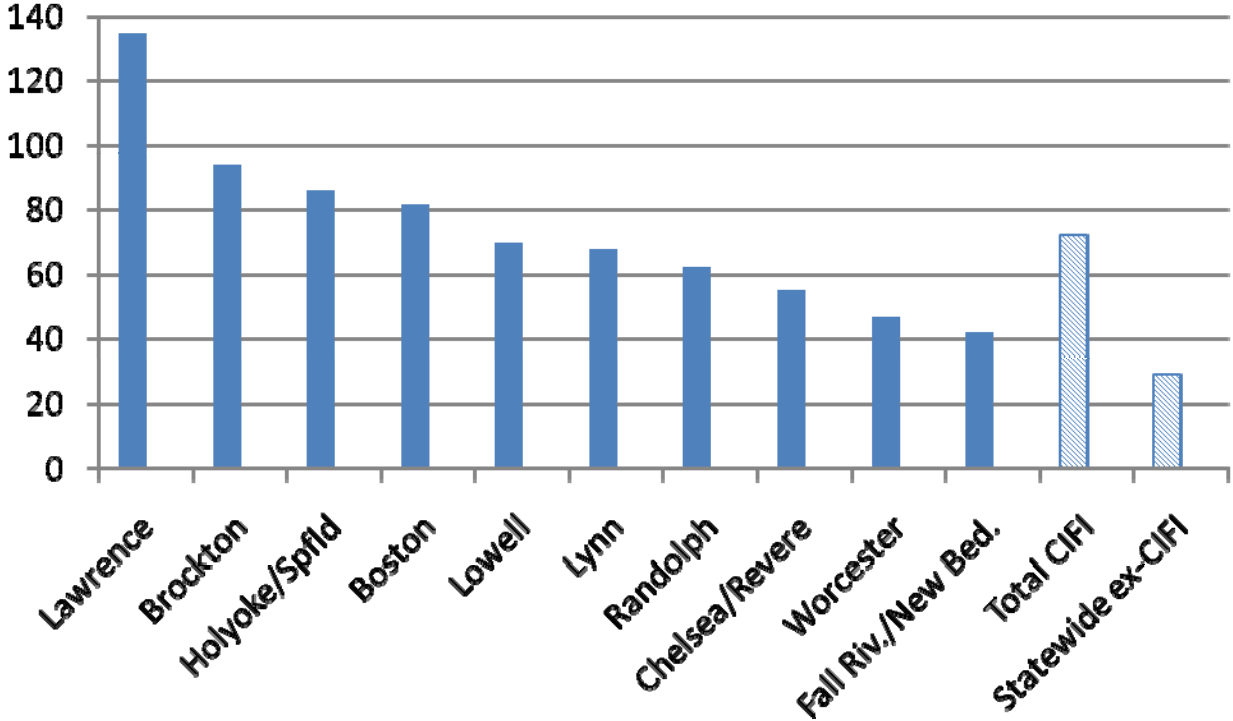
PIP Claims per 100 Accidents



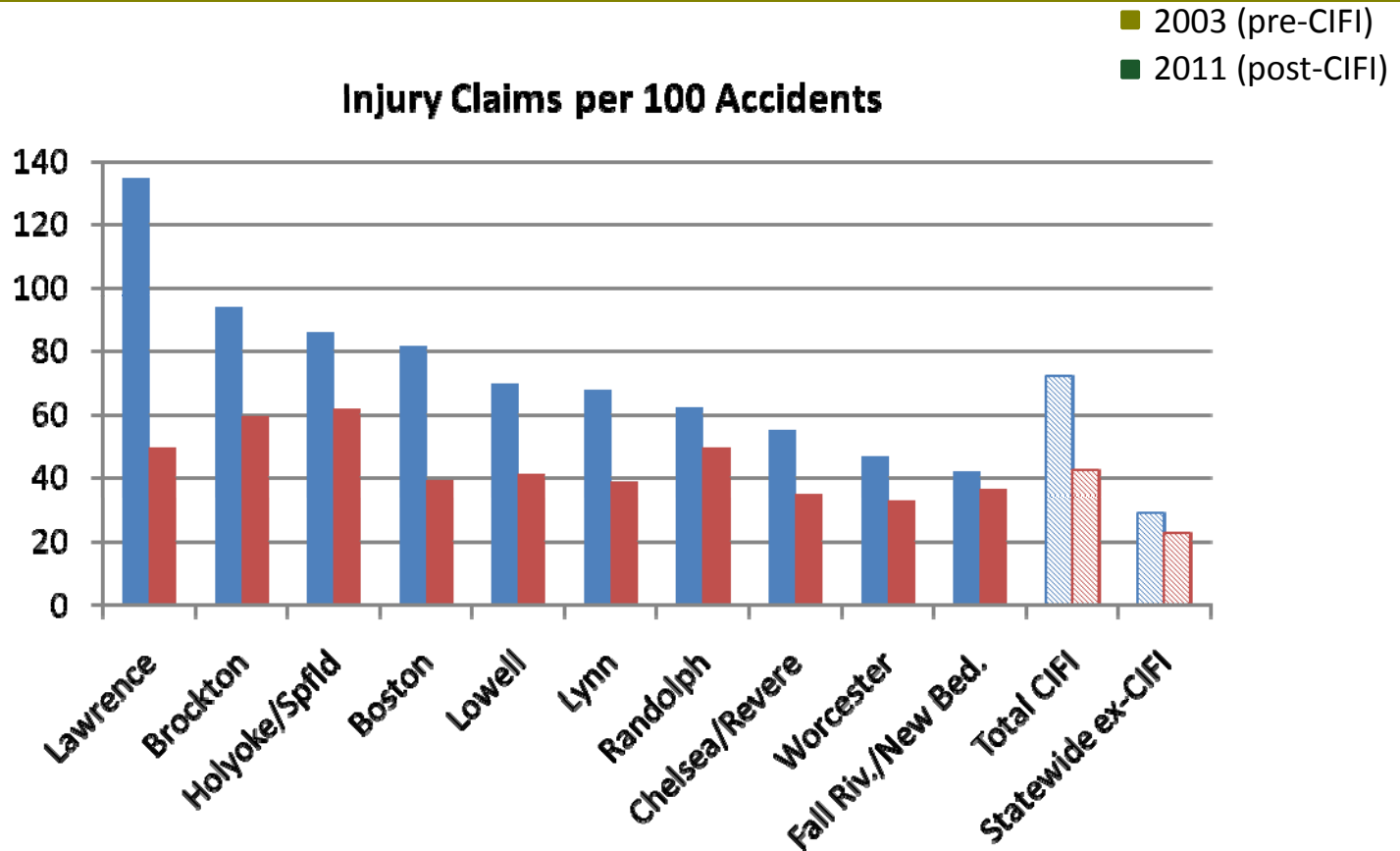
CIFI 10 YEAR RETROSPECTIVE

■ 2003 (pre-CIFI)

Injury Claims per 100 Accidents

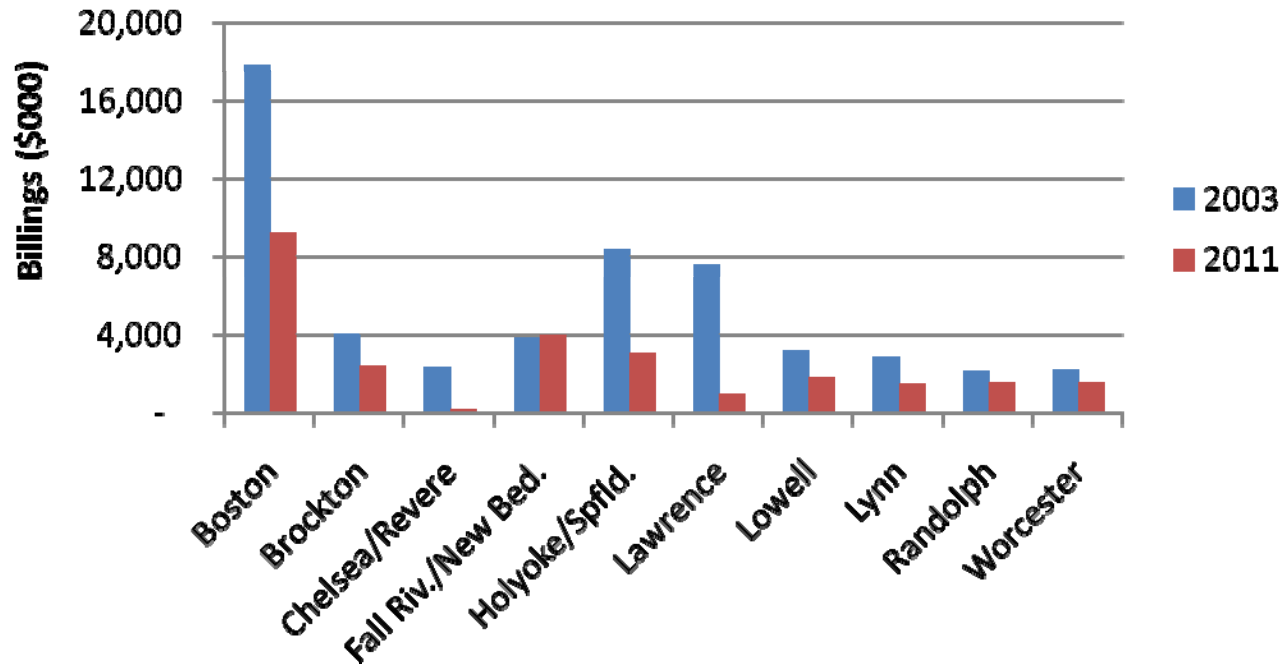


CIFI 10 YEAR RETROSPECTIVE



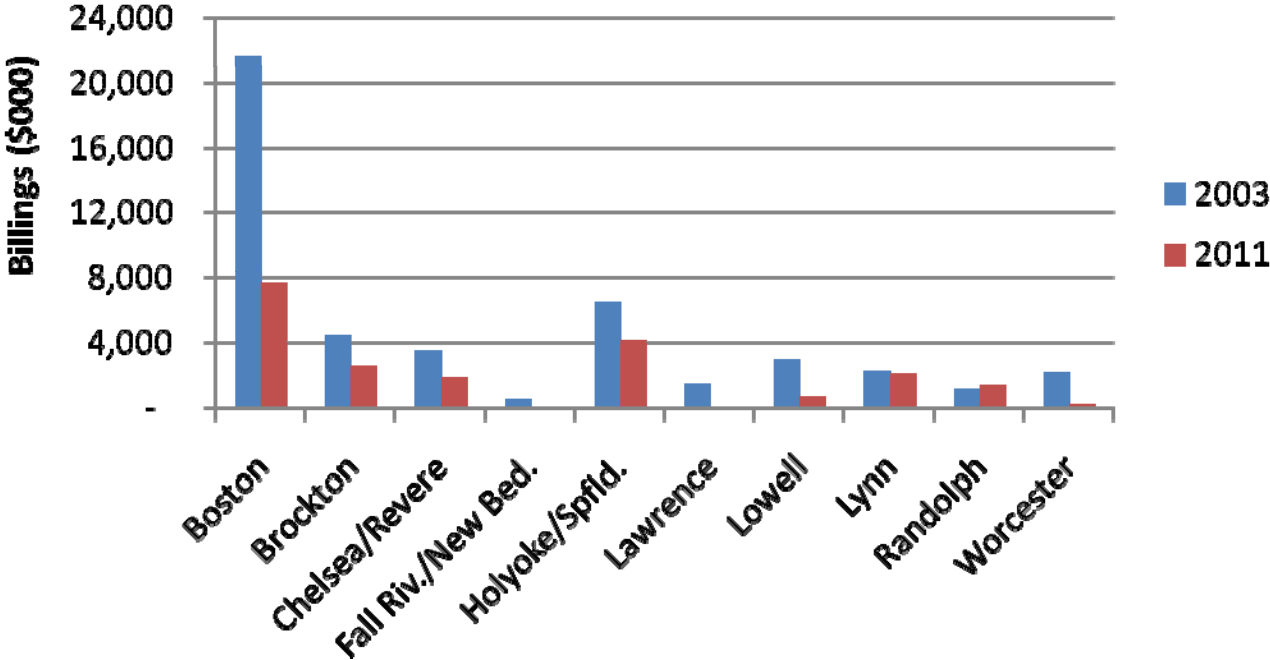
CIFI 10 YEAR RETROSPECTIVE

**Chiropractors
High Volume Provider Billings
(Total CIFI Savings \$27.9M)**



CIFI 10 YEAR RETROSPECTIVE

**Physical Therapists
High Volume Provider Billings
(Total CIFI Savings \$26M)**



CIFI 10 YEAR RETROSPECTIVE

Individuals Charged with Insurance Fraud Since the Introduction of CIFI Programs

CIFI Community	People Charged
Boston	488
Lawrence	484
Brockton	295
Springfield/Holyoke	177
Lynn	133
Fall River/New Bedford	95
Randolph	76
Lowell	64
Chelsea/Revere	59
Worcester	46
Statewide	1,917



CIFI 10 YEAR RETROSPECTIVE

Premium Savings Since the Introduction Of the CIFI Programs

CIFI Community	Year CIFI Introduced	Cumulative Premium Savings	Annual Savings per Vehicle
Boston	2004	\$346,832,292	\$227
Brockton	2004	49,557,834	151
Chelsea/Revere	2005	32,427,504	151
Fall River/New Bedford	2006	38,361,009	79
Holyoke/Springfield	2004	98,714,368	161
Lawrence	2003	68,439,496	335
Lowell	2004	73,558,881	195
Lynn	2004	56,832,742	188
Randolph	2005	31,664,118	262
Worcester	2006	78,441,701	180
Total CIFI		874,829,945	185
Industry ex-CIFI		3,317,731,266	139

Industry total written premium from 2003-2011 was \$36.1B.

Cumulative policyholder savings represents 11.6% of industry premium.



Papers

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