

**The State of Massachusetts
 Citizens Insurance Company of America (A Member of The Hanover Insurance Group)
 Private Passenger Automobile^{1/}
 Effective October 1, 2018 RB**

Annual Base Rates

Coverage	Base Limit or Deductible	Base Rate
Bodily Injury	20/40	\$136.00
Optional BI	20/40 included with Bodily Injury	\$136.00
Property Damage	\$5,000 limit	\$218.00
Medical Payment	\$5,000 limit	\$30.00
Personal Injury Protection	No deductible	\$166.00
Uninsured Bodily Injury	20/40	\$14.00
Underinsured Bodily Injury	20/40 included with Uninsured Bodily Injury	\$96.00
Comprehensive	\$500 deductible	\$107.00
Collision	\$500 deductible	\$301.00
Limited Collision	\$500 deductible	\$20.00
Substitute Transportation	\$30/day, \$900 total limit	\$61.00
Towing & Labor	\$50 per disablement limit	\$8.00
Additional Customized Equipment	First \$1,000 automatically included; see Sheet 11-17 for increased limits rating	\$8.00
Comprehensive/Collision Auto Loan/Lease Payoff	Flat rate	\$20.00
Upgraded Rental	Flat rate	\$8.00
Roadside Assistance	Flat rate	\$16.00

1/ Excludes data for motorcycles and other miscellaneous vehicle types

**The State of Massachusetts
Citizens Insurance Company of America (A Member of The Hanover Insurance Group)
Private Passenger Automobile^{1/}**

Effective October 1, 2018 RB

~~Effective April 1, 2018 NB & March 1, 2018 RB~~

Annual Base Rates

Coverage	Base Limit or Deductible	Base Rate	
Bodily Injury	20/40	\$136.00	\$133.00
Optional BI	20/40 included with Bodily Injury	\$136.00	\$133.00
Property Damage	\$5,000 limit	\$218.00	\$208.00
Medical Payment	\$5,000 limit	\$30.00	
Personal Injury Protection	No deductible	\$166.00	\$159.00
Uninsured Bodily Injury	20/40	\$14.00	
Underinsured Bodily Injury	20/40 included with Uninsured Bodily Injury	\$96.00	
Comprehensive	\$500 deductible	\$107.00	
Collision	\$500 deductible	\$301.00	\$300.00
Limited Collision	\$500 deductible	\$20.00	
Substitute Transportation	\$30/day, \$900 total limit	\$61.00	
Towing & Labor	\$50 per disablement limit	\$8.00	
Additional Customized Equipment	First \$1,000 automatically included; see Sheet 11-17 for increased limits rating	\$8.00	
Comprehensive/Collision Auto Loan/Lease Payoff	Flat rate	\$20.00	
Upgraded Rental	Flat rate	\$8.00	
Roadside Assistance	Flat rate	\$16.00	

1/ Excludes data for motorcycles and other miscellaneous vehicle types

**Massachusetts Private Passenger Motor Vehicle Insurance
Citizens Insurance Company of America
(A Member of The Hanover Insurance Group)
Revision of Private Passenger Automobile Insurance Program
Explanatory Memorandum**

Proposal: We are proposing an overall statewide change of 2.0% with a planned effective date of October 1st, 2018 for Renewal Business. The proposed change will be accomplished through changes to Base Rates.

Exhibits 1 and 2 provide the derivation of our rate indication by coverage. Our selected rate changes are summarized in Exhibit 1.

The following changes are requested:

Base Rate: We are proposing to modify base rates as shown below.

Coverage	Current Base Rate	Proposed Base Rate
Bodily Injury	\$133	\$136
Optional Bodily Injury	\$133	\$136
Property Damage	\$208	\$218
Personal Injury Protection	\$159	\$166
Collision	\$300	\$301

Overall Indication Description

General Philosophy: Hanover data within the state of Massachusetts is used whenever possible. If Hanover data within the state of Massachusetts is not available, then Hanover countrywide data or competitor information may be used in its place.

Data: The underlying experience is that of the Hanover Insurance Group. Experience is from the most recently available five calendar/accident year review period ending 06/30/2017.

On-Level Premiums: Reported premiums are adjusted to current rate level by using the parallelogram method. Please see Exhibit 5 for a summary of rate change history and current rate level factors.

Premium Trend: We have estimated separate retrospective and prospective premium trend rates for all coverages. The selected retrospective premium trends were based on a review of the recent year-over-year changes as well as the exponential fits of the average earned premiums at current rate levels. The prospective premium trends were selected based on a review of the recent year-over-year changes, the exponential fits of the average earned premiums at current rate levels as well as judgment in light of the shift to competitive rating. The selected retrospective and prospective premium trends by coverage can be found in Exhibit 6.

The retrospective premium trend period was selected to bring all earned premiums to a common date of 12/31/2016; the average effective date underlying the latest 12-month period. The prospective premium trend period was selected to bring all earned premiums to a common date of 10/1/2019.

Losses: Actual incurred losses (excluding ALAE) for 12-month accident periods ending 6/30/2017 were used as the basis of our indications. Exhibit 2 includes the loss dollars and feature counts.

Loss Development: The loss development factors used in our indications were selected based on Total Limits Incurred Losses by coverage (Bodily Injury, PIP, Property Damage, Collision and Comprehensive) as shown in Exhibits 3 & 4. The Ultimate Losses were calculated as the product of the incurred losses and the incurred loss development factor.

Loss Trend Selections: We have estimated separate retrospective and prospective loss trend rates for all coverages. The selected loss trends were based on a review of the recent year-over-year changes and exponential fits of the average frequency and severity, as well as industry loss data from AIB. The retrospective and prospective loss trends by coverage can be found in Exhibit 7. The retrospective loss trend period was selected to bring all losses to a common date of 12/31/2016, the average accident date underlying the latest 12-month period. The prospective loss trend period was selected to bring all losses to a common date of 10/1/2019.

Expenses: Exhibit 8 shows historic expenses for the most recent three calendar years available. The selected provisions were based on a review of the historical experience and reflect planned commission rates. The Unallocated Loss Adjustment Expense (ULAE) looks at the three most recent calendar years from the countrywide Insurance Expense Exhibit and allocates this to the Massachusetts using claim counts and average premium. Note: 50% of General and Other Acquisition Expense (OUE) are deemed to be variable in the indication calculations. This exhibit also includes derivation of the catastrophe provision for Comprehensive coverage.

Credibility: Our experience in Massachusetts is deemed to be 100% credible.

Accident Period Weights: We judgmentally selected accident year weights of 20%, 20%, 20%, 20%, and 20% for the five most recent accident periods.

Investment Income: The assets available for investment are the Total Assets less any Premium Receivable and Paid Expense. The Total Assets are the sum of the Unearned Premium and Loss Reserves plus Required Surplus. The unearned premium and loss reserves were determined from the expense and loss payment patterns. The required surplus is based on the Personal Auto Reserve-to-Surplus assumption. This analysis assumed overall Premium-to-Surplus ratios of 2.92 for Liability, 5.94 for Comprehensive, and 5.94 for Collision. The total surplus was allocated to individual lines of business based on the risk associated with a particular line. For Personal Auto, a 4.42 Reserve-to-Surplus ratio was assumed for Liability, 2.97 for Comprehensive, and 2.97 for Collision. The tax rate assumed in the model is 21.0%. See Exhibit 9 for further details.