

**Department of Commerce****Proposed Permanent Rules Governing Annuity Mortality Tables****2752.0010 DEFINITIONS.**

Subpart 1. **Terms.** For purposes of ~~parts 2752.0010 to 2752.0040~~ this chapter, the terms in this part have the meanings given them.

Subp. 2. **1983 Table "a."** "1983 Table 'a'" means the mortality table developed by the Society of Actuaries Committee to Recommend a New Mortality Basis for Individual Annuity Valuation ~~and~~<sub>2</sub> adopted as a recognized mortality table for annuities in June 1982; by the National Association of Insurance Commissioners, and published on page 454, NAIC Proceedings, Volume II, 1982.

Subp. 3. **1983 GAM Table.** "1983 GAM Table" means the mortality table developed by the Society of Actuaries Committee on Annuities ~~and~~<sub>2</sub> adopted as a recognized mortality table for annuities in December 1983; by the National Association of Insurance Commissioners, and published on pages 414-415, NAIC Proceedings, Volume I, 1984.

Subp. 4. **1994 GAR Table.** "1994 GAR Table" means the mortality table developed by the Society of Actuaries Group Annuity Valuation Table Task Force ~~and~~<sub>2</sub> adopted as a recognized mortality table for annuities in December 1996; by the National Association of Insurance Commissioners, and published on pages 866-867, Transactions of the Society of Actuaries, Volume XLVII, 1995.

Subp. 5. **Annuity 2000 Mortality Table.** "Annuity 2000 Mortality Table" means the mortality table developed by the Society of Actuaries Committee on Life Insurance Research ~~and~~<sub>2</sub> adopted as a recognized mortality table for annuities in December 1996; by the National Association of Insurance Commissioners, and published on page 240, Transactions of the Society of Actuaries, Volume XLVII, 1995.

Subp. 6. **Generational Mortality Table.** "Generational Mortality Table" means a mortality table containing a set of mortality rates that decrease for a given age from one year to the next based on a combination of a Period Table and a projection scale containing rates of mortality improvement.

Subp. 7. **Period Table.** "Period Table" means a table of mortality rates applicable to a given calendar year (the Period).

Subp. 8. **2012 Individual Annuity Reserving (IAR) Table.** "2012 Individual Annuity Reserving (IAR) Table" means the Generational Mortality Table developed by the Society of Actuaries Committee on Life Insurance Research, adopted as a recognized mortality table for annuities in December 2012 by the National Association of Insurance Commissioners, and containing rates,  $q_x^{2012+n}$ , derived from a combination of the 2012 IAM Period Table and Projection Scale G2, using the methodology stated in part 2752.0025.

Subp. 9. **2012 Individual Annuity Mortality Period Life (2012 IAM Period) Table.** "2012 Individual Annuity Mortality Period Life (2012 IAM Period) Table" means the Period Table containing loaded mortality rates for calendar year 2012. This table contains rates,  $q_x^{2012}$ , developed by the Society of Actuaries Committee on Life Insurance Research, was adopted as a recognized mortality table for annuities in December 2012 by the National Association of Insurance Commissioners, and is shown in parts 2752.0011 and 2752.0012, Tables 1 and 2.

Subp. 10. **Projection Scale G2 (Scale G2).** "Projection Scale G2 (Scale G2)" is a table of annual rates,  $G2_x$ , of mortality improvement by age for projecting future mortality rates beyond calendar year 2012. This table was developed by the Society of Actuaries Committee on Life Insurance Research, was adopted as a recognized table of mortality improvement rates for annuities in December 2012 by the National Association of Insurance Commissioners, and is shown in parts 2752.0013 and 2752.0014, Tables 3 and 4.

**2752.0011 2012 INDIVIDUAL ANNUITY MORTALITY PERIOD LIFE; FEMALE.**

Table 1  
2012 IAM Period Table  
Female, Age Nearest Birthday

<u>AGE</u>	<u>1000q<sub>x</sub><sup>2012</sup></u>	<u>AGE</u>	<u>1000q<sub>x</sub><sup>2012</sup></u>	<u>AGE</u>	<u>1000q<sub>x</sub><sup>2012</sup></u>	<u>AGE</u>	<u>1000q<sub>x</sub><sup>2012</sup></u>
<u>0</u>	<u>1.621</u>	<u>30</u>	<u>0.300</u>	<u>60</u>	<u>3.460</u>	<u>90</u>	<u>88.377</u>
<u>1</u>	<u>0.405</u>	<u>31</u>	<u>0.321</u>	<u>61</u>	<u>3.916</u>	<u>91</u>	<u>97.491</u>
<u>2</u>	<u>0.259</u>	<u>32</u>	<u>0.338</u>	<u>62</u>	<u>4.409</u>	<u>92</u>	<u>107.269</u>
<u>3</u>	<u>0.179</u>	<u>33</u>	<u>0.351</u>	<u>63</u>	<u>4.933</u>	<u>93</u>	<u>118.201</u>
<u>4</u>	<u>0.137</u>	<u>34</u>	<u>0.365</u>	<u>64</u>	<u>5.507</u>	<u>94</u>	<u>130.969</u>
<u>5</u>	<u>0.125</u>	<u>35</u>	<u>0.381</u>	<u>65</u>	<u>6.146</u>	<u>95</u>	<u>146.449</u>
<u>6</u>	<u>0.117</u>	<u>36</u>	<u>0.402</u>	<u>66</u>	<u>6.551</u>	<u>96</u>	<u>163.908</u>
<u>7</u>	<u>0.110</u>	<u>37</u>	<u>0.429</u>	<u>67</u>	<u>7.039</u>	<u>97</u>	<u>179.695</u>
<u>8</u>	<u>0.095</u>	<u>38</u>	<u>0.463</u>	<u>68</u>	<u>7.628</u>	<u>98</u>	<u>196.151</u>
<u>9</u>	<u>0.088</u>	<u>39</u>	<u>0.504</u>	<u>69</u>	<u>8.311</u>	<u>99</u>	<u>213.150</u>
<u>10</u>	<u>0.085</u>	<u>40</u>	<u>0.552</u>	<u>70</u>	<u>9.074</u>	<u>100</u>	<u>230.722</u>
<u>11</u>	<u>0.086</u>	<u>41</u>	<u>0.600</u>	<u>71</u>	<u>9.910</u>	<u>101</u>	<u>251.505</u>
<u>12</u>	<u>0.094</u>	<u>42</u>	<u>0.650</u>	<u>72</u>	<u>10.827</u>	<u>102</u>	<u>273.007</u>
<u>13</u>	<u>0.108</u>	<u>43</u>	<u>0.697</u>	<u>73</u>	<u>11.839</u>	<u>103</u>	<u>295.086</u>
<u>14</u>	<u>0.131</u>	<u>44</u>	<u>0.740</u>	<u>74</u>	<u>12.974</u>	<u>104</u>	<u>317.591</u>
<u>15</u>	<u>0.156</u>	<u>45</u>	<u>0.780</u>	<u>75</u>	<u>14.282</u>	<u>105</u>	<u>340.362</u>
<u>16</u>	<u>0.179</u>	<u>46</u>	<u>0.825</u>	<u>76</u>	<u>15.799</u>	<u>106</u>	<u>362.371</u>
<u>17</u>	<u>0.198</u>	<u>47</u>	<u>0.885</u>	<u>77</u>	<u>17.550</u>	<u>107</u>	<u>384.113</u>
<u>18</u>	<u>0.211</u>	<u>48</u>	<u>0.964</u>	<u>78</u>	<u>19.582</u>	<u>108</u>	<u>400.000</u>
<u>19</u>	<u>0.221</u>	<u>49</u>	<u>1.051</u>	<u>79</u>	<u>21.970</u>	<u>109</u>	<u>400.000</u>
<u>20</u>	<u>0.228</u>	<u>50</u>	<u>1.161</u>	<u>80</u>	<u>24.821</u>	<u>110</u>	<u>400.000</u>
<u>21</u>	<u>0.234</u>	<u>51</u>	<u>1.308</u>	<u>81</u>	<u>28.351</u>	<u>111</u>	<u>400.000</u>
<u>22</u>	<u>0.240</u>	<u>52</u>	<u>1.460</u>	<u>82</u>	<u>32.509</u>	<u>112</u>	<u>400.000</u>
<u>23</u>	<u>0.245</u>	<u>53</u>	<u>1.613</u>	<u>83</u>	<u>37.329</u>	<u>113</u>	<u>400.000</u>

<u>24</u>	<u>0.247</u>	<u>54</u>	<u>1.774</u>	<u>84</u>	<u>42.830</u>	<u>114</u>	<u>400.000</u>
<u>25</u>	<u>0.250</u>	<u>55</u>	<u>1.950</u>	<u>85</u>	<u>48.997</u>	<u>115</u>	<u>400.000</u>
<u>26</u>	<u>0.256</u>	<u>56</u>	<u>2.154</u>	<u>86</u>	<u>55.774</u>	<u>116</u>	<u>400.000</u>
<u>27</u>	<u>0.261</u>	<u>57</u>	<u>2.399</u>	<u>87</u>	<u>63.140</u>	<u>117</u>	<u>400.000</u>
<u>28</u>	<u>0.270</u>	<u>58</u>	<u>2.700</u>	<u>88</u>	<u>71.066</u>	<u>118</u>	<u>400.000</u>
<u>29</u>	<u>0.281</u>	<u>59</u>	<u>3.054</u>	<u>89</u>	<u>79.502</u>	<u>119</u>	<u>400.000</u>
<u>120</u>	<u>1000.000</u>						

**2752.0012 2012 INDIVIDUAL ANNUITY MORTALITY PERIOD LIFE; MALE.**

Table 2  
2012 IAM Period Table  
Male, Age Nearest Birthday

<u>AGE</u>	<u>1000q<sub>x</sub><sup>2012</sup></u>	<u>AGE</u>	<u>1000q<sub>x</sub><sup>2012</sup></u>	<u>AGE</u>	<u>1000q<sub>x</sub><sup>2012</sup></u>	<u>AGE</u>	<u>1000q<sub>x</sub><sup>2012</sup></u>
<u>0</u>	<u>1.605</u>	<u>30</u>	<u>0.741</u>	<u>60</u>	<u>5.096</u>	<u>90</u>	<u>109.993</u>
<u>1</u>	<u>0.401</u>	<u>31</u>	<u>0.751</u>	<u>61</u>	<u>5.614</u>	<u>91</u>	<u>123.119</u>
<u>2</u>	<u>0.275</u>	<u>32</u>	<u>0.754</u>	<u>62</u>	<u>6.169</u>	<u>92</u>	<u>137.168</u>
<u>3</u>	<u>0.229</u>	<u>33</u>	<u>0.756</u>	<u>63</u>	<u>6.759</u>	<u>93</u>	<u>152.171</u>
<u>4</u>	<u>0.174</u>	<u>34</u>	<u>0.756</u>	<u>64</u>	<u>7.398</u>	<u>94</u>	<u>168.194</u>
<u>5</u>	<u>0.168</u>	<u>35</u>	<u>0.756</u>	<u>65</u>	<u>8.106</u>	<u>95</u>	<u>185.260</u>
<u>6</u>	<u>0.165</u>	<u>36</u>	<u>0.756</u>	<u>66</u>	<u>8.548</u>	<u>96</u>	<u>197.322</u>
<u>7</u>	<u>0.159</u>	<u>37</u>	<u>0.756</u>	<u>67</u>	<u>9.076</u>	<u>97</u>	<u>214.751</u>
<u>8</u>	<u>0.143</u>	<u>38</u>	<u>0.756</u>	<u>68</u>	<u>9.708</u>	<u>98</u>	<u>232.507</u>
<u>9</u>	<u>0.129</u>	<u>39</u>	<u>0.800</u>	<u>69</u>	<u>10.463</u>	<u>99</u>	<u>250.397</u>
<u>10</u>	<u>0.113</u>	<u>40</u>	<u>0.859</u>	<u>70</u>	<u>11.357</u>	<u>100</u>	<u>268.607</u>
<u>11</u>	<u>0.111</u>	<u>41</u>	<u>0.926</u>	<u>71</u>	<u>12.418</u>	<u>101</u>	<u>290.016</u>
<u>12</u>	<u>0.132</u>	<u>42</u>	<u>0.999</u>	<u>72</u>	<u>13.675</u>	<u>102</u>	<u>311.849</u>
<u>13</u>	<u>0.169</u>	<u>43</u>	<u>1.069</u>	<u>73</u>	<u>15.150</u>	<u>103</u>	<u>333.962</u>
<u>14</u>	<u>0.213</u>	<u>44</u>	<u>1.142</u>	<u>74</u>	<u>16.860</u>	<u>104</u>	<u>356.207</u>
<u>15</u>	<u>0.254</u>	<u>45</u>	<u>1.219</u>	<u>75</u>	<u>18.815</u>	<u>105</u>	<u>380.000</u>

<u>16</u>	<u>0.293</u>	<u>46</u>	<u>1.318</u>	<u>76</u>	<u>21.031</u>	<u>106</u>	<u>400.000</u>
<u>17</u>	<u>0.328</u>	<u>47</u>	<u>1.454</u>	<u>77</u>	<u>23.540</u>	<u>107</u>	<u>400.000</u>
<u>18</u>	<u>0.359</u>	<u>48</u>	<u>1.627</u>	<u>78</u>	<u>26.375</u>	<u>108</u>	<u>400.000</u>
<u>19</u>	<u>0.387</u>	<u>49</u>	<u>1.829</u>	<u>79</u>	<u>29.572</u>	<u>109</u>	<u>400.000</u>
<u>20</u>	<u>0.414</u>	<u>50</u>	<u>2.057</u>	<u>80</u>	<u>33.234</u>	<u>110</u>	<u>400.000</u>
<u>21</u>	<u>0.443</u>	<u>51</u>	<u>2.302</u>	<u>81</u>	<u>37.533</u>	<u>111</u>	<u>400.000</u>
<u>22</u>	<u>0.473</u>	<u>52</u>	<u>2.545</u>	<u>82</u>	<u>42.261</u>	<u>112</u>	<u>400.000</u>
<u>23</u>	<u>0.513</u>	<u>53</u>	<u>2.779</u>	<u>83</u>	<u>47.441</u>	<u>113</u>	<u>400.000</u>
<u>24</u>	<u>0.554</u>	<u>54</u>	<u>3.011</u>	<u>84</u>	<u>53.233</u>	<u>114</u>	<u>400.000</u>
<u>25</u>	<u>0.602</u>	<u>55</u>	<u>3.254</u>	<u>85</u>	<u>59.855</u>	<u>115</u>	<u>400.000</u>
<u>26</u>	<u>0.655</u>	<u>56</u>	<u>3.529</u>	<u>86</u>	<u>67.514</u>	<u>116</u>	<u>400.000</u>
<u>27</u>	<u>0.688</u>	<u>57</u>	<u>3.845</u>	<u>87</u>	<u>76.340</u>	<u>117</u>	<u>400.000</u>
<u>28</u>	<u>0.710</u>	<u>58</u>	<u>4.213</u>	<u>88</u>	<u>86.388</u>	<u>118</u>	<u>400.000</u>
<u>29</u>	<u>0.727</u>	<u>59</u>	<u>4.631</u>	<u>89</u>	<u>97.634</u>	<u>119</u>	<u>400.000</u>
<u>120</u>							
<u>1000.000</u>							

**2752.0013 PROJECTION SCALE G2; FEMALE.**

Table 3  
Projection Scale G2  
Female, Age Nearest Birthday

<u>AGE</u>	<u>G2<sub>x</sub></u>	<u>AGE</u>	<u>G2<sub>x</sub></u>	<u>AGE</u>	<u>G2<sub>x</sub></u>	<u>AGE</u>	<u>G2<sub>x</sub></u>
<u>0</u>	<u>0.010</u>	<u>30</u>	<u>0.010</u>	<u>60</u>	<u>0.013</u>	<u>90</u>	<u>0.006</u>
<u>1</u>	<u>0.010</u>	<u>31</u>	<u>0.010</u>	<u>61</u>	<u>0.013</u>	<u>91</u>	<u>0.006</u>
<u>2</u>	<u>0.010</u>	<u>32</u>	<u>0.010</u>	<u>62</u>	<u>0.013</u>	<u>92</u>	<u>0.005</u>
<u>3</u>	<u>0.010</u>	<u>33</u>	<u>0.010</u>	<u>63</u>	<u>0.013</u>	<u>93</u>	<u>0.005</u>
<u>4</u>	<u>0.010</u>	<u>34</u>	<u>0.010</u>	<u>64</u>	<u>0.013</u>	<u>94</u>	<u>0.004</u>
<u>5</u>	<u>0.010</u>	<u>35</u>	<u>0.010</u>	<u>65</u>	<u>0.013</u>	<u>95</u>	<u>0.004</u>
<u>6</u>	<u>0.010</u>	<u>36</u>	<u>0.010</u>	<u>66</u>	<u>0.013</u>	<u>96</u>	<u>0.004</u>
<u>7</u>	<u>0.010</u>	<u>37</u>	<u>0.010</u>	<u>67</u>	<u>0.013</u>	<u>97</u>	<u>0.003</u>

<u>8</u>	<u>0.010</u>	<u>38</u>	<u>0.010</u>	<u>68</u>	<u>0.013</u>	<u>98</u>	<u>0.003</u>
<u>9</u>	<u>0.010</u>	<u>39</u>	<u>0.010</u>	<u>69</u>	<u>0.013</u>	<u>99</u>	<u>0.002</u>
<u>10</u>	<u>0.010</u>	<u>40</u>	<u>0.010</u>	<u>70</u>	<u>0.013</u>	<u>100</u>	<u>0.002</u>
<u>11</u>	<u>0.010</u>	<u>41</u>	<u>0.010</u>	<u>71</u>	<u>0.013</u>	<u>101</u>	<u>0.002</u>
<u>12</u>	<u>0.010</u>	<u>42</u>	<u>0.010</u>	<u>72</u>	<u>0.013</u>	<u>102</u>	<u>0.001</u>
<u>13</u>	<u>0.010</u>	<u>43</u>	<u>0.010</u>	<u>73</u>	<u>0.013</u>	<u>103</u>	<u>0.001</u>
<u>14</u>	<u>0.010</u>	<u>44</u>	<u>0.010</u>	<u>74</u>	<u>0.013</u>	<u>104</u>	<u>0.000</u>
<u>15</u>	<u>0.010</u>	<u>45</u>	<u>0.010</u>	<u>75</u>	<u>0.013</u>	<u>105</u>	<u>0.000</u>
<u>16</u>	<u>0.010</u>	<u>46</u>	<u>0.010</u>	<u>76</u>	<u>0.013</u>	<u>106</u>	<u>0.000</u>
<u>17</u>	<u>0.010</u>	<u>47</u>	<u>0.010</u>	<u>77</u>	<u>0.013</u>	<u>107</u>	<u>0.000</u>
<u>18</u>	<u>0.010</u>	<u>48</u>	<u>0.010</u>	<u>78</u>	<u>0.013</u>	<u>108</u>	<u>0.000</u>
<u>19</u>	<u>0.010</u>	<u>49</u>	<u>0.010</u>	<u>79</u>	<u>0.013</u>	<u>109</u>	<u>0.000</u>
<u>20</u>	<u>0.010</u>	<u>50</u>	<u>0.010</u>	<u>80</u>	<u>0.013</u>	<u>110</u>	<u>0.000</u>
<u>21</u>	<u>0.010</u>	<u>51</u>	<u>0.010</u>	<u>81</u>	<u>0.012</u>	<u>111</u>	<u>0.000</u>
<u>22</u>	<u>0.010</u>	<u>52</u>	<u>0.011</u>	<u>82</u>	<u>0.012</u>	<u>112</u>	<u>0.000</u>
<u>23</u>	<u>0.010</u>	<u>53</u>	<u>0.011</u>	<u>83</u>	<u>0.011</u>	<u>113</u>	<u>0.000</u>
<u>24</u>	<u>0.010</u>	<u>54</u>	<u>0.011</u>	<u>84</u>	<u>0.010</u>	<u>114</u>	<u>0.000</u>
<u>25</u>	<u>0.010</u>	<u>55</u>	<u>0.012</u>	<u>85</u>	<u>0.010</u>	<u>115</u>	<u>0.000</u>
<u>26</u>	<u>0.010</u>	<u>56</u>	<u>0.012</u>	<u>86</u>	<u>0.009</u>	<u>116</u>	<u>0.000</u>
<u>27</u>	<u>0.010</u>	<u>57</u>	<u>0.012</u>	<u>87</u>	<u>0.008</u>	<u>117</u>	<u>0.000</u>
<u>28</u>	<u>0.010</u>	<u>58</u>	<u>0.012</u>	<u>88</u>	<u>0.007</u>	<u>118</u>	<u>0.000</u>
<u>29</u>	<u>0.010</u>	<u>59</u>	<u>0.013</u>	<u>89</u>	<u>0.007</u>	<u>119</u>	<u>0.000</u>
<u>120</u>	<u>0.000</u>						

**2752.0014 PROJECTION SCALE G2; MALE.**

Table 4  
Projection Scale G2  
Male, Age Nearest Birthday

<u>AGE</u> <u>G2</u> <sub>x</sub>	<u>AGE</u> <u>G2</u> <sub>x</sub>	<u>AGE</u> <u>G2</u> <sub>x</sub>	<u>AGE</u> <u>G2</u> <sub>x</sub>
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<u>0</u>	<u>0.010</u>	<u>30</u>	<u>0.010</u>	<u>60</u>	<u>0.015</u>	<u>90</u>	<u>0.007</u>
<u>1</u>	<u>0.010</u>	<u>31</u>	<u>0.010</u>	<u>61</u>	<u>0.015</u>	<u>91</u>	<u>0.007</u>
<u>2</u>	<u>0.010</u>	<u>32</u>	<u>0.010</u>	<u>62</u>	<u>0.015</u>	<u>92</u>	<u>0.006</u>
<u>3</u>	<u>0.010</u>	<u>33</u>	<u>0.010</u>	<u>63</u>	<u>0.015</u>	<u>93</u>	<u>0.005</u>
<u>4</u>	<u>0.010</u>	<u>34</u>	<u>0.010</u>	<u>64</u>	<u>0.015</u>	<u>94</u>	<u>0.005</u>
<u>5</u>	<u>0.010</u>	<u>35</u>	<u>0.010</u>	<u>65</u>	<u>0.015</u>	<u>95</u>	<u>0.004</u>
<u>6</u>	<u>0.010</u>	<u>36</u>	<u>0.010</u>	<u>66</u>	<u>0.015</u>	<u>96</u>	<u>0.004</u>
<u>7</u>	<u>0.010</u>	<u>37</u>	<u>0.010</u>	<u>67</u>	<u>0.015</u>	<u>97</u>	<u>0.003</u>
<u>8</u>	<u>0.010</u>	<u>38</u>	<u>0.010</u>	<u>68</u>	<u>0.015</u>	<u>98</u>	<u>0.003</u>
<u>9</u>	<u>0.010</u>	<u>39</u>	<u>0.010</u>	<u>69</u>	<u>0.015</u>	<u>99</u>	<u>0.002</u>
<u>10</u>	<u>0.010</u>	<u>40</u>	<u>0.010</u>	<u>70</u>	<u>0.015</u>	<u>100</u>	<u>0.002</u>
<u>11</u>	<u>0.010</u>	<u>41</u>	<u>0.010</u>	<u>71</u>	<u>0.015</u>	<u>101</u>	<u>0.002</u>
<u>12</u>	<u>0.010</u>	<u>42</u>	<u>0.010</u>	<u>72</u>	<u>0.015</u>	<u>102</u>	<u>0.001</u>
<u>13</u>	<u>0.010</u>	<u>43</u>	<u>0.010</u>	<u>73</u>	<u>0.015</u>	<u>103</u>	<u>0.001</u>
<u>14</u>	<u>0.010</u>	<u>44</u>	<u>0.010</u>	<u>74</u>	<u>0.015</u>	<u>104</u>	<u>0.000</u>
<u>15</u>	<u>0.010</u>	<u>45</u>	<u>0.010</u>	<u>75</u>	<u>0.015</u>	<u>105</u>	<u>0.000</u>
<u>16</u>	<u>0.010</u>	<u>46</u>	<u>0.010</u>	<u>76</u>	<u>0.015</u>	<u>106</u>	<u>0.000</u>
<u>17</u>	<u>0.010</u>	<u>47</u>	<u>0.010</u>	<u>77</u>	<u>0.015</u>	<u>107</u>	<u>0.000</u>
<u>18</u>	<u>0.010</u>	<u>48</u>	<u>0.010</u>	<u>78</u>	<u>0.015</u>	<u>108</u>	<u>0.000</u>
<u>19</u>	<u>0.010</u>	<u>49</u>	<u>0.010</u>	<u>79</u>	<u>0.015</u>	<u>109</u>	<u>0.000</u>
<u>20</u>	<u>0.010</u>	<u>50</u>	<u>0.010</u>	<u>80</u>	<u>0.015</u>	<u>110</u>	<u>0.000</u>
<u>21</u>	<u>0.010</u>	<u>51</u>	<u>0.011</u>	<u>81</u>	<u>0.014</u>	<u>111</u>	<u>0.000</u>
<u>22</u>	<u>0.010</u>	<u>52</u>	<u>0.011</u>	<u>82</u>	<u>0.013</u>	<u>112</u>	<u>0.000</u>
<u>23</u>	<u>0.010</u>	<u>53</u>	<u>0.012</u>	<u>83</u>	<u>0.013</u>	<u>113</u>	<u>0.000</u>
<u>24</u>	<u>0.010</u>	<u>54</u>	<u>0.012</u>	<u>84</u>	<u>0.012</u>	<u>114</u>	<u>0.000</u>
<u>25</u>	<u>0.010</u>	<u>55</u>	<u>0.013</u>	<u>85</u>	<u>0.011</u>	<u>115</u>	<u>0.000</u>
<u>26</u>	<u>0.010</u>	<u>56</u>	<u>0.013</u>	<u>86</u>	<u>0.010</u>	<u>116</u>	<u>0.000</u>
<u>27</u>	<u>0.010</u>	<u>57</u>	<u>0.014</u>	<u>87</u>	<u>0.009</u>	<u>117</u>	<u>0.000</u>
<u>28</u>	<u>0.010</u>	<u>58</u>	<u>0.014</u>	<u>88</u>	<u>0.009</u>	<u>118</u>	<u>0.000</u>

29    0.01059    0.01589    0.008119   0.0001200.000**2752.0020 INDIVIDUAL ANNUITY OR PURE ENDOWMENT CONTRACTS.**

Subpart 1. **Approved table for annuity or pure endowment contract issued on or after August 1, 1978.** Except as provided in subparts 2 ~~and~~, 3, and 4, the 1983 Table "a" and the Annuity 2000 Mortality Table are recognized and approved as individual annuity mortality tables for valuation and, at the option of the company, either of these tables may be used for purposes of determining the minimum standard of valuation for an individual annuity or pure endowment contract issued on or after August 1, 1978.

Subp. 2. **Approved table for annuity or pure endowment contract issued on or after January 1, 1999.** Except as provided in ~~subpart~~ subparts 3 and 4, the Annuity 2000 Mortality Table shall be used for determining the minimum standard of valuation for an individual annuity or pure endowment contract issued on or after January 1, 1999.

Subp. 3. **Approved table for annuity or pure endowment contract based on life contingencies issued to fund periodic benefits.** The 1983 Table "a" without projection is to be used for determining the minimum standard of valuation for an individual annuity or pure endowment contract issued on or after January 1, 1999, solely when the contract is based on life contingencies and is issued to fund periodic benefits arising from:

A. settlements of various forms of claims pertaining to court settlements or out-of-court settlements from tort actions;

B. settlements involving similar actions such as workers' compensation claims;  
or

C. settlements of long-term disability claims where a temporary or life annuity has been used in lieu of continuing disability payments.



Subp. 4. **Approved table for annuity or pure endowment contract issued on or after January 1, 2015.** Except as provided in subpart 3, the 2012 IAR Table shall be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after January 1, 2015.

**2752.0025 APPLICATION OF THE 2012 IAR TABLE.**

In using the 2012 IAR Table, the mortality rate for a person age x in year (2012+n) is calculated as follows:

$$q_x^{2012+n} = q_x^{2012} (1 - G2_x)^n$$

where the  $q_x^{2012}$  and  $G2_x$  are as specified in the 2012 IAM Period Table and Projection Scale G2, respectively.

The resulting  $q_x^{2012+n}$  shall be rounded to three decimal places per 1,000, e.g., 0.741 deaths per 1,000. Also, the rounding shall occur according to the method in the example below, starting at the 2012 IAM Period Table rate.

For example, for a male age 30,  $q_{30}^{2012} = 0.741$ .

$q_{30}^{2013} = 0.741 * (1 - 0.010) ^ 1 = 0.73359$ , which is rounded to 0.734.

$q_{30}^{2014} = 0.741 * (1 - 0.010) ^ 2 = 0.7262541$ , which is rounded to 0.726.

A method leading to incorrect rounding would be to calculate  $q_{30}^{2014}$  as  $q_{30}^{2013} * (1 - 0.010)$ , or  $0.734 * 0.99 = 0.727$ .

It is incorrect to use the already rounded  $q_{30}^{2013}$  to calculate  $q_{30}^{2014}$ .

**REPEALER.** Minnesota Rules, part 2752.0015, is repealed.