Population Projections and Water Demand Forecasting

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Background

• Prepared by Carl Vinson Institute of Government at University of Georgia in June 2019 for the Governor’s Office of Planning and Budget (OPB)
• Based on data from 2013 to 2017
• Includes county estimates for all counties for each year between 2018 and 2035, then in five year intervals through 2062
Methodology: Cohort-Component

- Baseline cohorts drawn from years 2013 to 2017 of the US Census Bureau’s Population Estimates program
- Previous census not used to capture post-recession trends


Fertility, Mortality, & Migration Rates

- Fertility rates: average birth counts per female household population
- Mortality rates: deaths per baseline population; life expectancy gradually increases in model
- Migration: Estimated based on migration for 2013-2017 and assumed rates will subside and stabilize

Population Projections

- County populations projected and summed for state projection
- Yearly estimates for 2018 to 2035, five-year interval estimates for 2035 to 2062
Statewide Projections

Note: Updated projections completed through 2062
## 2019 Population Projections in LFO

<table>
<thead>
<tr>
<th>County</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
<th>2060</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baker</td>
<td>3,106</td>
<td>2,851</td>
<td>2,567</td>
<td>2,331</td>
<td>2,203</td>
</tr>
<tr>
<td>Calhoun</td>
<td>6,387</td>
<td>6,291</td>
<td>6,159</td>
<td>5,986</td>
<td>5,891</td>
</tr>
<tr>
<td>Colquitt</td>
<td>45,826</td>
<td>45,926</td>
<td>45,337</td>
<td>44,147</td>
<td>42,749</td>
</tr>
<tr>
<td>Decatur</td>
<td>26,512</td>
<td>25,881</td>
<td>24,905</td>
<td>23,689</td>
<td>22,646</td>
</tr>
<tr>
<td>Dougherty</td>
<td>87,247</td>
<td>81,538</td>
<td>75,711</td>
<td>69,754</td>
<td>65,524</td>
</tr>
<tr>
<td>Early</td>
<td>10,226</td>
<td>10,111</td>
<td>9,934</td>
<td>9,731</td>
<td>9,644</td>
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<tr>
<td>Grady</td>
<td>24,670</td>
<td>24,396</td>
<td>23,720</td>
<td>22,840</td>
<td>22,260</td>
</tr>
<tr>
<td>Lee</td>
<td>29,806</td>
<td>31,047</td>
<td>31,842</td>
<td>32,183</td>
<td>32,641</td>
</tr>
<tr>
<td>Miller</td>
<td>5,844</td>
<td>6,015</td>
<td>6,288</td>
<td>6,605</td>
<td>7,019</td>
</tr>
<tr>
<td>Mitchell</td>
<td>22,050</td>
<td>21,405</td>
<td>20,466</td>
<td>19,423</td>
<td>18,732</td>
</tr>
<tr>
<td>Seminole</td>
<td>8,020</td>
<td>7,251</td>
<td>6,412</td>
<td>5,709</td>
<td>5,253</td>
</tr>
<tr>
<td>Terrell</td>
<td>8,514</td>
<td>7,887</td>
<td>7,238</td>
<td>6,687</td>
<td>6,446</td>
</tr>
<tr>
<td>Thomas</td>
<td>44,725</td>
<td>44,858</td>
<td>44,467</td>
<td>43,745</td>
<td>43,534</td>
</tr>
<tr>
<td>Worth</td>
<td>20,289</td>
<td>19,591</td>
<td>18,721</td>
<td>17,919</td>
<td>17,626</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>343,222</td>
<td>335,048</td>
<td>323,767</td>
<td>310,749</td>
<td>302,168</td>
</tr>
</tbody>
</table>
LFO Population Projection Comparison

Population

Year

2010 2015 2020 2025 2030 2035 2040 2045 2050 2055 2060 2065

Population

0 100,000 200,000 300,000 400,000 500,000 600,000 700,000 800,000 900,000

2015 2019
Next Steps

• Water demand and wastewater generation projection updates planned for 2020
  – Updated population projections
  – Updated per capita water demand rates
  – Updated wastewater flow data

• Methodology review meetings with water and wastewater permit holders

Review water and wastewater demand forecasts with Regional Water Councils
Next Steps

- Update water use forecasts beginning 2020
  - Municipal
  - Agricultural
  - Energy production
  - Industrial

*Figure 4-1: Water Demand in 2015 and 2050*

Note: Figure 4–1 from 2017 LFO Regional Water Plan