

Appendix 16A

Regional Economic Impacts of Water Conveyance Facility Construction

The tables in this appendix represent detailed estimates of the economic effects of constructing the proposed water conveyance facility under various alternatives. Results were developed using estimated construction expenditures as an input to the IMPLAN model, which applies multipliers to generate estimates of employment and income change for the five-county Delta region. Further discussion of this analytical approach is provided in Chapter 16, *Socioeconomics*, Section 16.3.1.2. Model results are presented by alternative, economic sector, and year of construction. Results are also presented in terms of direct and total effects; total effects incorporate direct, indirect, and induced economic effects.

Table 16A-7. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 4: Construction-Related Impacts

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
<u>Year 1</u>				
<u>Agriculture</u>	<u>0</u>	<u>0</u>	<u>0.0</u>	<u>0.0</u>
<u>Manufacturing and construction^b</u>	<u>66</u>	<u>67</u>	<u>0.0</u>	<u>0.0</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>1</u>	<u>0.0</u>	<u>0.0</u>
<u>Trade</u>	<u>0</u>	<u>5</u>	<u>0.0</u>	<u>0.2</u>
<u>Information</u>	<u>0</u>	<u>0</u>	<u>0.0</u>	<u>0.0</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>4</u>	<u>0.0</u>	<u>0.2</u>
<u>Services</u>	<u>0</u>	<u>13</u>	<u>0.0</u>	<u>0.6</u>
<u>Government</u>	<u>0</u>	<u>0</u>	<u>0.0</u>	<u>0.0</u>
<u>Total</u>	<u>66</u>	<u>90</u>	<u>0.0</u>	<u>1.1</u>
<u>Year 2</u>				
<u>Agriculture</u>	<u>0</u>	<u>1</u>	<u>0.0</u>	<u>0.1</u>
<u>Manufacturing and construction^b</u>	<u>747</u>	<u>752</u>	<u>0.0</u>	<u>0.4</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>10</u>	<u>0.5</u>	<u>1.0</u>
<u>Trade</u>	<u>0</u>	<u>55</u>	<u>0.0</u>	<u>2.1</u>
<u>Information</u>	<u>0</u>	<u>5</u>	<u>0.0</u>	<u>0.3</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>46</u>	<u>0.0</u>	<u>2.0</u>
<u>Services</u>	<u>0</u>	<u>154</u>	<u>0.0</u>	<u>6.9</u>
<u>Government</u>	<u>0</u>	<u>3</u>	<u>0.0</u>	<u>0.2</u>
<u>Total</u>	<u>747</u>	<u>1,025</u>	<u>0.5</u>	<u>13.0</u>

	<u>Employment</u>		<u>Income (million\$)</u>	
	<u>Direct</u>	<u>Total^a</u>	<u>Direct</u>	<u>Total^a</u>
<u>Year 3</u>				
<u>Agriculture</u>	<u>0</u>	<u>14</u>	<u>0.0</u>	<u>0.7</u>
<u>Manufacturing and construction^b</u>	<u>2,427</u>	<u>4,928</u>	<u>167.6</u>	<u>176.9</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>119</u>	<u>1.0</u>	<u>8.8</u>
<u>Trade</u>	<u>0</u>	<u>564</u>	<u>0.0</u>	<u>22.4</u>
<u>Information</u>	<u>0</u>	<u>54</u>	<u>0.0</u>	<u>4.1</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>462</u>	<u>0.0</u>	<u>20.7</u>
<u>Services</u>	<u>0</u>	<u>1,822</u>	<u>0.0</u>	<u>88.8</u>
<u>Government</u>	<u>0</u>	<u>24</u>	<u>0.0</u>	<u>2.2</u>
<u>Total</u>	<u>2,427</u>	<u>7,988</u>	<u>168.6</u>	<u>324.6</u>
<u>Year 4</u>				
<u>Agriculture</u>	<u>0</u>	<u>12</u>	<u>0.0</u>	<u>0.6</u>
<u>Manufacturing and construction^b</u>	<u>1,743</u>	<u>4,028</u>	<u>153.3</u>	<u>161.5</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>98</u>	<u>0.0</u>	<u>6.8</u>
<u>Trade</u>	<u>0</u>	<u>480</u>	<u>0.0</u>	<u>19.1</u>
<u>Information</u>	<u>0</u>	<u>47</u>	<u>0.0</u>	<u>3.5</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>392</u>	<u>0.0</u>	<u>17.6</u>
<u>Services</u>	<u>0</u>	<u>1,566</u>	<u>0.0</u>	<u>76.7</u>
<u>Government</u>	<u>0</u>	<u>21</u>	<u>0.0</u>	<u>1.8</u>
<u>Total</u>	<u>1,743</u>	<u>6,644</u>	<u>153.3</u>	<u>287.8</u>
<u>Year 5</u>				
<u>Agriculture</u>	<u>0</u>	<u>10</u>	<u>0.0</u>	<u>0.5</u>
<u>Manufacturing and construction^b</u>	<u>1,124</u>	<u>3,193</u>	<u>139.0</u>	<u>146.3</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>85</u>	<u>0.0</u>	<u>5.9</u>
<u>Trade</u>	<u>0</u>	<u>403</u>	<u>0.0</u>	<u>16.1</u>
<u>Information</u>	<u>0</u>	<u>40</u>	<u>0.0</u>	<u>3.0</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>328</u>	<u>0.0</u>	<u>14.8</u>
<u>Services</u>	<u>0</u>	<u>1,328</u>	<u>0.0</u>	<u>65.4</u>
<u>Government</u>	<u>0</u>	<u>17</u>	<u>0.0</u>	<u>1.5</u>
<u>Total</u>	<u>1,124</u>	<u>5,402</u>	<u>139.0</u>	<u>253.4</u>
<u>Year 6</u>				
<u>Agriculture</u>	<u>0</u>	<u>12</u>	<u>0.0</u>	<u>0.6</u>
<u>Manufacturing and construction^b</u>	<u>1,572</u>	<u>3,877</u>	<u>154.8</u>	<u>163.0</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>97</u>	<u>0.0</u>	<u>6.7</u>
<u>Trade</u>	<u>0</u>	<u>471</u>	<u>0.0</u>	<u>18.8</u>
<u>Information</u>	<u>0</u>	<u>46</u>	<u>0.0</u>	<u>3.4</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>384</u>	<u>0.0</u>	<u>17.3</u>
<u>Services</u>	<u>0</u>	<u>1,543</u>	<u>0.0</u>	<u>75.7</u>
<u>Government</u>	<u>0</u>	<u>20</u>	<u>0.0</u>	<u>1.8</u>
<u>Total</u>	<u>1,572</u>	<u>6,451</u>	<u>154.8</u>	<u>287.4</u>

	<u>Employment</u>		<u>Income (million\$)</u>	
	<u>Direct</u>	<u>Total^a</u>	<u>Direct</u>	<u>Total^a</u>
<u>Year 7</u>				
<u>Agriculture</u>	<u>0</u>	<u>14</u>	<u>0.0</u>	<u>0.8</u>
<u>Manufacturing and construction^b</u>	<u>2,207</u>	<u>4,979</u>	<u>185.9</u>	<u>196.0</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>120</u>	<u>0.0</u>	<u>8.3</u>
<u>Trade</u>	<u>0</u>	<u>589</u>	<u>0.0</u>	<u>23.4</u>
<u>Information</u>	<u>0</u>	<u>57</u>	<u>0.0</u>	<u>4.3</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>481</u>	<u>0.0</u>	<u>21.6</u>
<u>Services</u>	<u>0</u>	<u>1,918</u>	<u>0.0</u>	<u>93.9</u>
<u>Government</u>	<u>0</u>	<u>25</u>	<u>0.0</u>	<u>2.3</u>
<u>Total</u>	<u>2,207</u>	<u>8,185</u>	<u>185.9</u>	<u>350.6</u>
<u>Year 8</u>				
<u>Agriculture</u>	<u>0</u>	<u>15</u>	<u>0.0</u>	<u>0.8</u>
<u>Manufacturing and construction^b</u>	<u>2,272</u>	<u>5,045</u>	<u>185.9</u>	<u>196.0</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>121</u>	<u>0.0</u>	<u>8.3</u>
<u>Trade</u>	<u>0</u>	<u>594</u>	<u>0.0</u>	<u>23.6</u>
<u>Information</u>	<u>0</u>	<u>58</u>	<u>0.0</u>	<u>4.3</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>485</u>	<u>0.0</u>	<u>21.8</u>
<u>Services</u>	<u>0</u>	<u>1,932</u>	<u>0.0</u>	<u>94.5</u>
<u>Government</u>	<u>0</u>	<u>25</u>	<u>0.0</u>	<u>2.3</u>
<u>Total</u>	<u>2,272</u>	<u>8,274</u>	<u>185.9</u>	<u>351.7</u>
<u>Year 9</u>				
<u>Agriculture</u>	<u>0</u>	<u>15</u>	<u>0.0</u>	<u>0.8</u>
<u>Manufacturing and construction^b</u>	<u>2,278</u>	<u>5,071</u>	<u>187.4</u>	<u>197.5</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>122</u>	<u>0.0</u>	<u>8.4</u>
<u>Trade</u>	<u>0</u>	<u>597</u>	<u>0.0</u>	<u>23.8</u>
<u>Information</u>	<u>0</u>	<u>58</u>	<u>0.0</u>	<u>4.3</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>488</u>	<u>0.0</u>	<u>21.9</u>
<u>Services</u>	<u>0</u>	<u>1,944</u>	<u>0.0</u>	<u>95.1</u>
<u>Government</u>	<u>0</u>	<u>26</u>	<u>0.0</u>	<u>2.3</u>
<u>Total</u>	<u>2,278</u>	<u>8,320</u>	<u>187.4</u>	<u>354.2</u>
<u>Year 10</u>				
<u>Agriculture</u>	<u>0</u>	<u>15</u>	<u>0.0</u>	<u>0.8</u>
<u>Manufacturing and construction^b</u>	<u>2,194</u>	<u>4,977</u>	<u>186.7</u>	<u>196.7</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>120</u>	<u>0.0</u>	<u>8.3</u>
<u>Trade</u>	<u>0</u>	<u>590</u>	<u>0.0</u>	<u>23.5</u>
<u>Information</u>	<u>0</u>	<u>57</u>	<u>0.0</u>	<u>4.3</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>482</u>	<u>0.0</u>	<u>21.6</u>
<u>Services</u>	<u>0</u>	<u>1,921</u>	<u>0.0</u>	<u>94.1</u>
<u>Government</u>	<u>0</u>	<u>25</u>	<u>0.0</u>	<u>2.3</u>
<u>Total</u>	<u>2,194</u>	<u>8,187</u>	<u>186.7</u>	<u>351.6</u>

	<u>Employment</u>		<u>Income (million\$)</u>	
	<u>Direct</u>	<u>Total^a</u>	<u>Direct</u>	<u>Total^a</u>
<u>Year 11</u>				
<u>Agriculture</u>	<u>0</u>	<u>14</u>	<u>0.0</u>	<u>0.8</u>
<u>Manufacturing and construction^b</u>	<u>2,114</u>	<u>4,915</u>	<u>187.9</u>	<u>198.0</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>120</u>	<u>0.0</u>	<u>8.3</u>
<u>Trade</u>	<u>0</u>	<u>587</u>	<u>0.0</u>	<u>23.4</u>
<u>Information</u>	<u>0</u>	<u>57</u>	<u>0.0</u>	<u>4.3</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>479</u>	<u>0.0</u>	<u>21.5</u>
<u>Services</u>	<u>0</u>	<u>1,915</u>	<u>0.0</u>	<u>93.8</u>
<u>Government</u>	<u>0</u>	<u>25</u>	<u>0.0</u>	<u>2.3</u>
<u>Total</u>	<u>2,114</u>	<u>8,113</u>	<u>187.9</u>	<u>352.4</u>
<u>Year 12</u>				
<u>Agriculture</u>	<u>0</u>	<u>15</u>	<u>0.0</u>	<u>0.8</u>
<u>Manufacturing and construction^b</u>	<u>2,248</u>	<u>5,250</u>	<u>201.5</u>	<u>212.3</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>129</u>	<u>0.0</u>	<u>8.9</u>
<u>Trade</u>	<u>0</u>	<u>628</u>	<u>0.0</u>	<u>25.0</u>
<u>Information</u>	<u>0</u>	<u>61</u>	<u>0.0</u>	<u>4.6</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>513</u>	<u>0.0</u>	<u>23.1</u>
<u>Services</u>	<u>0</u>	<u>2,050</u>	<u>0.0</u>	<u>100.4</u>
<u>Government</u>	<u>0</u>	<u>27</u>	<u>0.0</u>	<u>2.4</u>
<u>Total</u>	<u>2,248</u>	<u>8,673</u>	<u>201.5</u>	<u>377.5</u>
<u>Year 13</u>				
<u>Agriculture</u>	<u>0</u>	<u>8</u>	<u>0.0</u>	<u>0.4</u>
<u>Manufacturing and construction^b</u>	<u>1,723</u>	<u>3,128</u>	<u>94.0</u>	<u>99.3</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>67</u>	<u>0.0</u>	<u>4.6</u>
<u>Trade</u>	<u>0</u>	<u>341</u>	<u>0.0</u>	<u>13.6</u>
<u>Information</u>	<u>0</u>	<u>33</u>	<u>0.0</u>	<u>2.4</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>280</u>	<u>0.0</u>	<u>12.5</u>
<u>Services</u>	<u>0</u>	<u>1,092</u>	<u>0.0</u>	<u>53.0</u>
<u>Government</u>	<u>0</u>	<u>15</u>	<u>0.0</u>	<u>1.3</u>
<u>Total</u>	<u>1,723</u>	<u>4,964</u>	<u>94.0</u>	<u>187.2</u>
<u>Year 14</u>				
<u>Agriculture</u>	<u>0</u>	<u>1</u>	<u>0.0</u>	<u>0.1</u>
<u>Manufacturing and construction^b</u>	<u>486</u>	<u>560</u>	<u>4.8</u>	<u>5.2</u>
<u>Transportation, utilities, & warehousing</u>	<u>0</u>	<u>7</u>	<u>0.0</u>	<u>0.5</u>
<u>Trade</u>	<u>0</u>	<u>46</u>	<u>0.0</u>	<u>1.8</u>
<u>Information</u>	<u>0</u>	<u>4</u>	<u>0.0</u>	<u>0.3</u>
<u>Financial, insurance, & real estate</u>	<u>0</u>	<u>39</u>	<u>0.0</u>	<u>1.7</u>
<u>Services</u>	<u>0</u>	<u>136</u>	<u>0.0</u>	<u>6.3</u>
<u>Government</u>	<u>0</u>	<u>2</u>	<u>0.0</u>	<u>0.2</u>
<u>Total</u>	<u>486</u>	<u>795</u>	<u>4.8</u>	<u>16.1</u>

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.

1
2
3