# **TECHNICAL ANALYSIS** to Accompany **Moving Into Prosperity** The Potential Impact of the Trans-Texas Corridor on Business Activity in Texas: An Analysis of the Effects in Key Trans-Texas Corridors and the State of Texas



**June 2006** 



**Contact Information** 

## The Perryman Group

510 N. Valley Mills Drive, Suite 300 Waco, Texas 76710 Phone: 254.751.9595 Fax: 254.751.7855 www.perrymangroup.com info@perrymangroup.com

> *perrymangroup.com* © 2006 by The Perryman Group

### **APPENDIX L**

### Potential Impact of Efficiency Gains Stemming from TTC-35 on the TTC-35 Study Area



# Table L.1The Gross Potential Impact of Efficiency Gains from Short-Term TTC-35Construction Projects on Business Activity in the TTC-35 Study Area\*Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$73,305,713          | \$23,038,051     | \$12,227,341       | 914                              |
| Metal Mining                      | \$14,165,169          | \$5,823,738      | \$4,988,475        | 93                               |
| Coal Mining                       | \$30,121,549          | \$5,571,745      | \$8,183,471        | 137                              |
| Crude Petroleum & Natural Gas     | \$73,447,915          | \$17,779,587     | \$7,296,726        | 29                               |
| Nonmetallic Mineral Mining        | \$13,007,528          | \$4,493,701      | \$3,385,875        | 87                               |
| Construction                      | \$352,172,526         | \$148,386,088    | \$119,962,555      | 2,557                            |
| Food & Kindred Products           | \$158,676,840         | \$33,897,090     | \$17,655,767       | 468                              |
| Tobacco Manufactures              | \$4,756               | \$773            | \$583              | 0                                |
| Textile Mill products             | \$5,765,859           | \$1,241,179      | \$1,174,419        | 32                               |
| Apparel & Other Textile Products  | \$17,185,512          | \$8,205,213      | \$4,581,535        | 137                              |
| Lumber & Wood Products            | \$10,871,367          | \$3,939,823      | \$2,638,398        | 80                               |
| Furniture & Fixtures              | \$85,900              | \$26,362         | \$23,505           | 1                                |
| Paper & Allied Products           | \$15,937,046          | \$5,463,754      | \$3,183,017        | 58                               |
| Printing & Publishing             | \$21,886,414          | \$11,800,633     | \$7,097,542        | 142                              |
| Chemicals & Allied Products       | \$35,678,007          | \$7,273,278      | \$5,587,359        | 45                               |
| Petroleum Refining                | \$63,770,125          | \$10,069,430     | \$2,034,559        | 14                               |
| Rubber & Plastic Products         | \$13,856,751          | \$3,081,189      | \$2,416,197        | 33                               |
| Leather & Leather Products        | \$54,901              | \$23,453         | \$14,846           | 0                                |
| Stone, Clay & Glass Products      | \$12,554,417          | \$5,560,045      | \$3,368,253        | 65                               |
| Primary Metals                    | \$62,103,606          | \$16,208,158     | \$14,033,510       | 224                              |
| Fabricated Metal Products         | \$28,587,877          | \$11,509,181     | \$7,723,853        | 172                              |
| Machinery, Except Electrical      | \$60,939,779          | \$19,495,272     | \$17,594,728       | 261                              |
| Electrical Machinery              | \$44,778,570          | \$21,839,566     | \$15,646,430       | 205                              |
| Motor Vehicles                    | \$55,354,202          | \$16,167,186     | \$9,847,300        | 88                               |
| Other Transportation Equipment    | \$46,767,382          | \$21,870,050     | \$14,979,209       | 281                              |
| Instruments                       | \$350,269             | \$100,613        | \$117,292          | 2                                |
| Miscellaneous Manufacturing       | \$275,004             | \$70,092         | \$65,374           | 1                                |
| Transportation & Warehousing      | \$162,022,943         | \$83,430,782     | \$59,848,108       | 1,140                            |
| Communication                     | \$35,813,728          | \$22,772,812     | \$10,708,407       | 146                              |
| Electric Utilities                | \$42,806,360          | \$8,209,523      | \$3,944,687        | 18                               |
| Gas Utilities                     | \$20,541,120          | \$2,630,911      | \$1,293,621        | 6                                |
| Trade                             | \$793,234,974         | \$558,265,868    | \$341,524,484      | 11,266                           |
| Finance, Insurance, & Real Estate | \$352,456,882         | \$129,725,186    | \$48,548,680       | 643                              |
| Other Services                    | \$615,632,473         | \$369,918,670    | \$319,603,846      | 7,297                            |
| Government Enterprises            | \$12,860,724          | \$7,844,779      | \$6,266,573        | 138                              |
| Total                             | \$3,247,074,188       | \$1,585,733,780  | \$1,077,566,523    | 26,779                           |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

# Table L.2The Gross Potential Impact of Efficiency Gains from Mid-Term TTC-35Construction Projects on Business Activity in the TTC-35 Study Area\*Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$3,474,319           | \$1,091,887      | \$579,514          | 43                               |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | \$3,467,447           | \$839,367        | \$344,476          | 1                                |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | \$16,867,245          | \$7,106,927      | \$5,745,587        | 122                              |
| Food & Kindred Products           | \$7,526,122           | \$1,607,756      | \$837,422          | 22                               |
| Tobacco Manufactures              | \$227                 | \$37             | \$28               | 0                                |
| Textile Mill products             | \$273,484             | \$58,871         | \$55,705           | 2                                |
| Apparel & Other Textile Products  | \$820,611             | \$391,800        | \$218,769          | 7                                |
| Lumber & Wood Products            | \$518,010             | \$187,729        | \$125,717          | 4                                |
| Furniture & Fixtures              | \$4,093               | \$1,256          | \$1,120            | 0                                |
| Paper & Allied Products           | \$757,713             | \$259,769        | \$151,334          | 3                                |
| Printing & Publishing             | \$1,042,364           | \$562,018        | \$338,028          | 7                                |
| Chemicals & Allied Products       | \$1,693,223           | \$345,179        | \$265,167          | 2                                |
| Petroleum Refining                | \$3,019,810           | \$476,834        | \$96,346           | 1                                |
| Rubber & Plastic Products         | \$658,929             | \$146,520        | \$114,897          | 2                                |
| Leather & Leather Products        | \$2,630               | \$1,123          | \$711              | 0                                |
| Stone, Clay & Glass Products      | \$600,353             | \$265,882        | \$161,070          | 3                                |
| Primary Metals                    | \$2,942,954           | \$768,069        | \$665,017          | 11                               |
| Fabricated Metal Products         | \$1,360,665           | \$547,789        | \$367,624          | 8                                |
| Machinery, Except Electrical      | \$2,906,251           | \$929,740        | \$839,102          | 12                               |
| Electrical Machinery              | \$2,126,975           | \$1,037,376      | \$743,203          | 10                               |
| Motor Vehicles                    | \$2,638,961           | \$770,756        | \$469,461          | 4                                |
| Other Transportation Equipment    | \$2,227,562           | \$1,041,685      | \$713,470          | 13                               |
| Instruments                       | \$16,641              | \$4,780          | \$5,572            | 0                                |
| Miscellaneous Manufacturing       | \$13,115              | \$3,343          | \$3,118            | 0                                |
| Transportation & Warehousing      | \$7,795,129           | \$4,013,961      | \$2,879,368        | 55                               |
| Communication                     | \$1,695,472           | \$1,078,097      | \$506,951          | 7                                |
| Electric Utilities                | \$1,472,373           | \$282,376        | \$135,682          | 1                                |
| Gas Utilities                     | \$972,564             | \$124,566        | \$61,249           | 0                                |
| Trade                             | \$37,728,821          | \$26,552,930     | \$16,244,009       | 536                              |
| Finance, Insurance, & Real Estate | \$16,799,981          | \$6,183,397      | \$2,314,090        | 31                               |
| Other Services                    | \$29,279,798          | \$17,593,523     | \$15,200,524       | 347                              |
| Government Enterprises            | \$612,213             | \$373,437        | \$298,310          | 7                                |
| Total                             | \$151,316,053         | \$74,648,779     | \$50,482,639       | 1,260                            |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

# Table L.3The Gross Potential Impact of Efficiency Gains from Long-Term TTC-35Construction Projects on Business Activity in the TTC-35 Study Area\*Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$21,695,189          | \$6,818,225      | \$3,618,742        | 271                              |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | \$21,652,281          | \$5,241,383      | \$2,151,058        | 9                                |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | \$105,326,572         | \$44,378,811     | \$35,877,997       | 765                              |
| Food & Kindred Products           | \$46,996,451          | \$10,039,543     | \$5,229,234        | 139                              |
| Tobacco Manufactures              | \$1,416               | \$230            | \$174              | 0                                |
| Textile Mill products             | \$1,707,756           | \$367,617        | \$347,844          | 10                               |
| Apparel & Other Textile Products  | \$5,124,258           | \$2,446,574      | \$1,366,091        | 41                               |
| Lumber & Wood Products            | \$3,234,682           | \$1,172,260      | \$785,033          | 24                               |
| Furniture & Fixtures              | \$25,561              | \$7,844          | \$6,994            | 0                                |
| Paper & Allied Products           | \$4,731,494           | \$1,622,115      | \$944,995          | 17                               |
| Printing & Publishing             | \$6,508,984           | \$3,509,489      | \$2,110,797        | 42                               |
| Chemicals & Allied Products       | \$10,573,239          | \$2,155,448      | \$1,655,823        | 13                               |
| Petroleum Refining                | \$18,857,038          | \$2,977,564      | \$601,626          | 4                                |
| Rubber & Plastic Products         | \$4,114,648           | \$914,934        | \$717,470          | 10                               |
| Leather & Leather Products        | \$16,423              | \$7,015          | \$4,441            | 0                                |
| Stone, Clay & Glass Products      | \$3,748,873           | \$1,660,285      | \$1,005,794        | 19                               |
| Primary Metals                    | \$18,377,110          | \$4,796,164      | \$4,152,663        | 66                               |
| Fabricated Metal Products         | \$8,496,596           | \$3,420,641      | \$2,295,605        | 51                               |
| Machinery, Except Electrical      | \$18,147,926          | \$5,805,711      | \$5,239,727        | 78                               |
| Electrical Machinery              | \$13,281,775          | \$6,477,835      | \$4,640,889        | 61                               |
| Motor Vehicles                    | \$16,478,844          | \$4,812,942      | \$2,931,523        | 26                               |
| Other Transportation Equipment    | \$13,909,888          | \$6,504,746      | \$4,455,223        | 84                               |
| Instruments                       | \$103,911             | \$29,848         | \$34,796           | 1                                |
| Miscellaneous Manufacturing       | \$81,894              | \$20,873         | \$19,468           | 0                                |
| Transportation & Warehousing      | \$48,676,249          | \$25,064,953     | \$17,980,055       | 342                              |
| Communication                     | \$10,587,283          | \$6,732,117      | \$3,165,628        | 43                               |
| Electric Utilities                | \$9,194,148           | \$1,763,279      | \$847,258          | 4                                |
| Gas Utilities                     | \$6,073,124           | \$777,847        | \$382,468          | 2                                |
| Trade                             | \$235,595,525         | \$165,808,297    | \$101,434,811      | 3,346                            |
| Finance, Insurance, & Real Estate | \$104,906,548         | \$38,611,876     | \$14,450,206       | 191                              |
| Other Services                    | \$182,836,071         | \$109,861,775    | \$94,918,826       | 2,167                            |
| Government Enterprises            | \$3,822,929           | \$2,331,908      | \$1,862,777        | 41                               |
| Total                             | \$944,884,685         | \$466,140,151    | \$315,236,035      | 7,866                            |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

#### Table L.4

#### The Total Gross Potential Impact of Efficiency Gains Associated with TTC-35 Construction Projects on Business Activity in the TTC-35 Study Area\* Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$98,475,221          | \$30,948,163     | \$16,425,597       | 1,228                            |
| Metal Mining                      | \$14,165,169          | \$5,823,738      | \$4,988,475        | 93                               |
| Coal Mining                       | \$30,121,549          | \$5,571,745      | \$8,183,471        | 137                              |
| Crude Petroleum & Natural Gas     | \$98,567,643          | \$23,860,337     | \$9,792,260        | 39                               |
| Nonmetallic Mineral Mining        | \$13,007,528          | \$4,493,701      | \$3,385,875        | 87                               |
| Construction                      | \$474,366,343         | \$199,871,826    | \$161,586,138      | 3,444                            |
| Food & Kindred Products           | \$213,199,413         | \$45,544,389     | \$23,722,424       | 629                              |
| Tobacco Manufactures              | \$6,400               | \$1,039          | \$784              | 0                                |
| Textile Mill products             | \$7,747,099           | \$1,667,667      | \$1,577,968        | 43                               |
| Apparel & Other Textile Products  | \$23,130,381          | \$11,043,588     | \$6,166,395        | 184                              |
| Lumber & Wood Products            | \$14,624,058          | \$5,299,811      | \$3,549,147        | 107                              |
| Furniture & Fixtures              | \$115,554             | \$35,463         | \$31,619           | 1                                |
| Paper & Allied Products           | \$21,426,253          | \$7,345,638      | \$4,279,346        | 78                               |
| Printing & Publishing             | \$29,437,762          | \$15,872,140     | \$9,546,368        | 191                              |
| Chemicals & Allied Products       | \$47,944,469          | \$9,773,905      | \$7,508,350        | 60                               |
| Petroleum Refining                | \$85,646,973          | \$13,523,827     | \$2,732,530        | 19                               |
| Rubber & Plastic Products         | \$18,630,329          | \$4,142,642      | \$3,248,564        | 44                               |
| Leather & Leather Products        | \$73,954              | \$31,591         | \$19,997           | 0                                |
| Stone, Clay & Glass Products      | \$16,903,644          | \$7,486,212      | \$4,535,117        | 87                               |
| Primary Metals                    | \$83,423,669          | \$21,772,391     | \$18,851,190       | 300                              |
| Fabricated Metal Products         | \$38,445,137          | \$15,477,611     | \$10,387,082       | 231                              |
| Machinery, Except Electrical      | \$81,993,956          | \$26,230,723     | \$23,673,558       | 351                              |
| Electrical Machinery              | \$60,187,319          | \$29,354,777     | \$21,030,522       | 276                              |
| Motor Vehicles                    | \$74,472,007          | \$21,750,884     | \$13,248,284       | 118                              |
| Other Transportation Equipment    | \$62,904,832          | \$29,416,482     | \$20,147,903       | 378                              |
| Instruments                       | \$470,821             | \$135,241        | \$157,660          | 3                                |
| Miscellaneous Manufacturing       | \$370,012             | \$94,307         | \$87,960           | 1                                |
| Transportation & Warehousing      | \$218,494,321         | \$112,509,696    | \$80,707,531       | 1,537                            |
| Communication                     | \$48,096,484          | \$30,583,026     | \$14,380,986       | 196                              |
| Electric Utilities                | \$53,472,881          | \$10,255,179     | \$4,927,627        | 22                               |
| Gas Utilities                     | \$27,586,808          | \$3,533,324      | \$1,737,339        | 8                                |
| Trade                             | \$1,066,559,320       | \$750,627,095    | \$459,203,304      | 15,149                           |
| Finance, Insurance, & Real Estate | \$474,163,411         | \$174,520,459    | \$65,312,975       | 865                              |
| Other Services                    | \$827,748,342         | \$497,373,968    | \$429,723,195      | 9,812                            |
| Government Enterprises            | \$17,295,866          | \$10,550,125     | \$8,427,660        | 185                              |
| Total                             | \$4,343,274,926       | \$2,126,522,709  | \$1,443,285,197    | 35,905                           |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

# Table L.5The Offsetting Potential Impact of Foregone Efficiency Gains from AlternativeHighway Construction Projects Stemming from Use of TxDOT Funds for TTC-35Construction on Business Activity in the TTC-35 Study Area\*:Short-Term Effects—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$5,312,701)         | (\$1,669,642)    | (\$886,155)        | -66                              |
| Metal Mining                      | (\$1,026,595)         | (\$422,065)      | (\$361,531)        | -7                               |
| Coal Mining                       | (\$2,183,006)         | (\$403,802)      | (\$593,083)        | -10                              |
| Crude Petroleum & Natural Gas     | (\$5,323,007)         | (\$1,288,544)    | (\$528,817)        | -2                               |
| Nonmetallic Mineral Mining        | (\$942,697)           | (\$325,673)      | (\$245,385)        | -6                               |
| Construction                      | (\$25,523,078)        | (\$10,754,018)   | (\$8,694,073)      | -185                             |
| Food & Kindred Products           | (\$11,499,822)        | (\$2,456,631)    | (\$1,279,570)      | -34                              |
| Tobacco Manufactures              | (\$345)               | (\$56)           | (\$42)             | 0                                |
| Textile Mill products             | (\$417,870)           | (\$89,952)       | (\$85,114)         | -2                               |
| Apparel & Other Textile Products  | (\$1,245,489)         | (\$594,658)      | (\$332,039)        | -10                              |
| Lumber & Wood Products            | (\$787,883)           | (\$285,532)      | (\$191,213)        | -6                               |
| Furniture & Fixtures              | (\$6,225)             | (\$1,911)        | (\$1,703)          | 0                                |
| Paper & Allied Products           | (\$1,155,009)         | (\$395,976)      | (\$230,684)        | -4                               |
| Printing & Publishing             | (\$1,586,179)         | (\$855,230)      | (\$514,382)        | -10                              |
| Chemicals & Allied Products       | (\$2,585,700)         | (\$527,118)      | (\$404,934)        | -3                               |
| Petroleum Refining                | (\$4,621,626)         | (\$729,764)      | (\$147,451)        | -1                               |
| Rubber & Plastic Products         | (\$1,004,243)         | (\$223,304)      | (\$175,110)        | -2                               |
| Leather & Leather Products        | (\$3,979)             | (\$1,700)        | (\$1,076)          | 0                                |
| Stone, Clay & Glass Products      | (\$909,859)           | (\$402,954)      | (\$244,108)        | -5                               |
| Primary Metals                    | (\$4,500,848)         | (\$1,174,657)    | (\$1,017,054)      | -16                              |
| Fabricated Metal Products         | (\$2,071,856)         | (\$834,107)      | (\$559,773)        | -12                              |
| Machinery, Except Electrical      | (\$4,416,502)         | (\$1,412,885)    | (\$1,275,147)      | -19                              |
| Electrical Machinery              | (\$3,245,247)         | (\$1,582,784)    | (\$1,133,947)      | -15                              |
| Motor Vehicles                    | (\$4,011,697)         | (\$1,171,688)    | (\$713,666)        | -6                               |
| Other Transportation Equipment    | (\$3,389,383)         | (\$1,584,993)    | (\$1,085,592)      | -20                              |
| Instruments                       | (\$25,385)            | (\$7,292)        | (\$8,501)          | 0                                |
| Miscellaneous Manufacturing       | (\$19,930)            | (\$5,080)        | (\$4,738)          | 0                                |
| Transportation & Warehousing      | (\$11,742,325)        | (\$6,046,498)    | (\$4,337,385)      | -83                              |
| Communication                     | (\$2,595,536)         | (\$1,650,419)    | (\$776,073)        | -11                              |
| Electric Utilities                | (\$3,102,315)         | (\$594,971)      | (\$285,884)        | -1                               |
| Gas Utilities                     | (\$1,488,681)         | (\$190,671)      | (\$93,753)         | 0                                |
| Trade                             | (\$57,488,295)        | (\$40,459,326)   | (\$24,751,380)     | -817                             |
| Finance, Insurance, & Real Estate | (\$25,543,686)        | (\$9,401,602)    | (\$3,518,479)      | -47                              |
| Other Services                    | (\$44,616,869)        | (\$26,809,198)   | (\$23,162,721)     | -529                             |
| Government Enterprises            | (\$932,058)           | (\$568,536)      | (\$454,159)        | -10                              |
| Total                             | (\$235,325,930)       | (\$114,923,237)  | (\$78,094,718)     | -1,941                           |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

#### Table L.6

#### The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for TTC-35 Construction on Business Activity in the TTC-35 Study Area\*: Mid-Term Effects—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$251,795)           | (\$79,133)       | (\$41,999)         | -3                               |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | (\$251,297)           | (\$60,832)       | (\$24,965)         | 0                                |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | (\$1,222,424)         | (\$515,062)      | (\$416,401)        | -9                               |
| Food & Kindred Products           | (\$545,442)           | (\$116,519)      | (\$60,691)         | -2                               |
| Tobacco Manufactures              | (\$16)                | (\$3)            | (\$2)              | 0                                |
| Textile Mill products             | (\$19,820)            | (\$4,267)        | (\$4,037)          | 0                                |
| Apparel & Other Textile Products  | (\$59,472)            | (\$28,395)       | (\$15,855)         | 0                                |
| Lumber & Wood Products            | (\$37,542)            | (\$13,605)       | (\$9,111)          | 0                                |
| Furniture & Fixtures              | (\$297)               | (\$91)           | (\$81)             | 0                                |
| Paper & Allied Products           | (\$54,914)            | (\$18,826)       | (\$10,968)         | 0                                |
| Printing & Publishing             | (\$75,543)            | (\$40,731)       | (\$24,498)         | 0                                |
| Chemicals & Allied Products       | (\$122,713)           | (\$25,016)       | (\$19,218)         | 0                                |
| Petroleum Refining                | (\$218,855)           | (\$34,558)       | (\$6,982)          | 0                                |
| Rubber & Plastic Products         | (\$47,755)            | (\$10,619)       | (\$8,327)          | 0                                |
| Leather & Leather Products        | (\$191)               | (\$81)           | (\$52)             | 0                                |
| Stone, Clay & Glass Products      | (\$43,510)            | (\$19,269)       | (\$11,673)         | 0                                |
| Primary Metals                    | (\$213,285)           | (\$55,664)       | (\$48,196)         | -1                               |
| Fabricated Metal Products         | (\$98,612)            | (\$39,700)       | (\$26,643)         | -1                               |
| Machinery, Except Electrical      | (\$210,625)           | (\$67,381)       | (\$60,812)         | -1                               |
| Electrical Machinery              | (\$154,149)           | (\$75,182)       | (\$53,862)         | -1                               |
| Motor Vehicles                    | (\$191,254)           | (\$55,859)       | (\$34,023)         | 0                                |
| Other Transportation Equipment    | (\$161,439)           | (\$75,494)       | (\$51,707)         | -1                               |
| Instruments                       | (\$1,206)             | (\$346)          | (\$404)            | 0                                |
| Miscellaneous Manufacturing       | (\$950)               | (\$242)          | (\$226)            | 0                                |
| Transportation & Warehousing      | (\$564,938)           | (\$290,905)      | (\$208,677)        | -4                               |
| Communication                     | (\$122,876)           | (\$78,133)       | (\$36,740)         | 0                                |
| Electric Utilities                | (\$106,708)           | (\$20,465)       | (\$9,833)          | 0                                |
| Gas Utilities                     | (\$70,485)            | (\$9,028)        | (\$4,439)          | 0                                |
| Trade                             | (\$2,734,329)         | (\$1,924,376)    | (\$1,177,256)      | -39                              |
| Finance, Insurance, & Real Estate | (\$1,217,549)         | (\$448,131)      | (\$167,710)        | -2                               |
| Other Services                    | (\$2,122,001)         | (\$1,275,059)    | (\$1,101,631)      | -25                              |
| Government Enterprises            | (\$44,369)            | (\$27,064)       | (\$21,619)         | 0                                |
| Total                             | (\$10,966,362)        | (\$5,410,038)    | (\$3,658,640)      | -91                              |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

#### Table L.7

#### The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for TTC-35 Construction on Business Activity in the TTC-35 Study Area\*: Long-Term Effects—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$1,572,320)         | (\$494,139)      | (\$262,262)        | -20                              |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | (\$1,569,211)         | (\$379,860)      | (\$155,894)        | -1                               |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | (\$7,633,356)         | (\$3,216,275)    | (\$2,600,194)      | -55                              |
| Food & Kindred Products           | (\$3,405,984)         | (\$727,598)      | (\$378,979)        | -10                              |
| Tobacco Manufactures              | (\$103)               | (\$17)           | (\$13)             | 0                                |
| Textile Mill products             | (\$123,767)           | (\$26,642)       | (\$25,209)         | -1                               |
| Apparel & Other Textile Products  | (\$371,371)           | (\$177,311)      | (\$99,005)         | -3                               |
| Lumber & Wood Products            | (\$234,428)           | (\$84,957)       | (\$56,894)         | -2                               |
| Furniture & Fixtures              | (\$1,852)             | (\$569)          | (\$507)            | 0                                |
| Paper & Allied Products           | (\$342,907)           | (\$117,560)      | (\$68,487)         | -1                               |
| Printing & Publishing             | (\$471,727)           | (\$254,344)      | (\$152,976)        | -3                               |
| Chemicals & Allied Products       | (\$766,277)           | (\$156,212)      | (\$120,003)        | -1                               |
| Petroleum Refining                | (\$1,366,630)         | (\$215,794)      | (\$43,602)         | 0                                |
| Rubber & Plastic Products         | (\$298,202)           | (\$66,308)       | (\$51,997)         | -1                               |
| Leather & Leather Products        | (\$1,190)             | (\$508)          | (\$322)            | 0                                |
| Stone, Clay & Glass Products      | (\$271,693)           | (\$120,326)      | (\$72,893)         | -1                               |
| Primary Metals                    | (\$1,331,848)         | (\$347,593)      | (\$300,957)        | -5                               |
| Fabricated Metal Products         | (\$615,776)           | (\$247,905)      | (\$166,370)        | -4                               |
| Machinery, Except Electrical      | (\$1,315,239)         | (\$420,759)      | (\$379,740)        | -6                               |
| Electrical Machinery              | (\$962,573)           | (\$469,470)      | (\$336,340)        | -4                               |
| Motor Vehicles                    | (\$1,194,275)         | (\$348,809)      | (\$212,457)        | -2                               |
| Other Transportation Equipment    | (\$1,008,094)         | (\$471,420)      | (\$322,884)        | -6                               |
| Instruments                       | (\$7,531)             | (\$2,163)        | (\$2,522)          | 0                                |
| Miscellaneous Manufacturing       | (\$5,935)             | (\$1,513)        | (\$1,411)          | 0                                |
| Transportation & Warehousing      | (\$3,527,725)         | (\$1,816,538)    | (\$1,303,073)      | -25                              |
| Communication                     | (\$767,295)           | (\$487,898)      | (\$229,423)        | -3                               |
| Electric Utilities                | (\$666,330)           | (\$127,791)      | (\$61,404)         | 0                                |
| Gas Utilities                     | (\$440,139)           | (\$56,373)       | (\$27,719)         | 0                                |
| Trade                             | (\$17,074,367)        | (\$12,016,662)   | (\$7,351,308)      | -243                             |
| Finance, Insurance, & Real Estate | (\$7,602,916)         | (\$2,798,327)    | (\$1,047,253)      | -14                              |
| Other Services                    | (\$13,250,719)        | (\$7,962,037)    | (\$6,879,073)      | -157                             |
| Government Enterprises            | (\$277,060)           | (\$169,001)      | (\$135,001)        | -3                               |
| Total                             | (\$68,478,838)        | (\$33,782,679)   | (\$22,846,171)     | -570                             |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

# Table L.8The Total Offsetting Potential Impact of Foregone Efficiency Gains fromAlternative Highway Construction Projects Stemming from Use of TxDOT Fundsfor TTC-35 Construction on Business Activity in the TTC-35 Study Area\*:Total Effects—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$7,136,817)         | (\$2,242,913)    | (\$1,190,416)      | -89                              |
| Metal Mining                      | (\$1,026,595)         | (\$422,065)      | (\$361,531)        | -7                               |
| Coal Mining                       | (\$2,183,006)         | (\$403,802)      | (\$593,083)        | -10                              |
| Crude Petroleum & Natural Gas     | (\$7,143,515)         | (\$1,729,236)    | (\$709,677)        | -3                               |
| Nonmetallic Mineral Mining        | (\$942,697)           | (\$325,673)      | (\$245,385)        | -6                               |
| Construction                      | (\$34,378,858)        | (\$14,485,355)   | (\$11,710,668)     | -250                             |
| Food & Kindred Products           | (\$15,451,248)        | (\$3,300,749)    | (\$1,719,240)      | -46                              |
| Tobacco Manufactures              | (\$464)               | (\$75)           | (\$57)             | 0                                |
| Textile Mill products             | (\$561,457)           | (\$120,861)      | (\$114,360)        | -3                               |
| Apparel & Other Textile Products  | (\$1,676,333)         | (\$800,364)      | (\$446,898)        | -13                              |
| Lumber & Wood Products            | (\$1,059,853)         | (\$384,094)      | (\$257,218)        | -8                               |
| Furniture & Fixtures              | (\$8,375)             | (\$2,570)        | (\$2,292)          | 0                                |
| Paper & Allied Products           | (\$1,552,830)         | (\$532,362)      | (\$310,138)        | -6                               |
| Printing & Publishing             | (\$2,133,449)         | (\$1,150,305)    | (\$691,856)        | -14                              |
| Chemicals & Allied Products       | (\$3,474,690)         | (\$708,346)      | (\$544,154)        | -4                               |
| Petroleum Refining                | (\$6,207,112)         | (\$980,115)      | (\$198,035)        | -1                               |
| Rubber & Plastic Products         | (\$1,350,200)         | (\$300,231)      | (\$235,434)        | -3                               |
| Leather & Leather Products        | (\$5,360)             | (\$2,290)        | (\$1,449)          | 0                                |
| Stone, Clay & Glass Products      | (\$1,225,062)         | (\$542,550)      | (\$328,675)        | -6                               |
| Primary Metals                    | (\$6,045,982)         | (\$1,577,915)    | (\$1,366,206)      | -22                              |
| Fabricated Metal Products         | (\$2,786,243)         | (\$1,121,712)    | (\$752,785)        | -17                              |
| Machinery, Except Electrical      | (\$5,942,366)         | (\$1,901,025)    | (\$1,715,699)      | -25                              |
| Electrical Machinery              | (\$4,361,969)         | (\$2,127,435)    | (\$1,524,150)      | -20                              |
| Motor Vehicles                    | (\$5,397,226)         | (\$1,576,357)    | (\$960,146)        | -9                               |
| Other Transportation Equipment    | (\$4,558,916)         | (\$2,131,907)    | (\$1,460,183)      | -27                              |
| Instruments                       | (\$34,122)            | (\$9,801)        | (\$11,426)         | 0                                |
| Miscellaneous Manufacturing       | (\$26,816)            | (\$6,835)        | (\$6,375)          | 0                                |
| Transportation & Warehousing      | (\$15,834,988)        | (\$8,153,940)    | (\$5,849,135)      | -111                             |
| Communication                     | (\$3,485,707)         | (\$2,216,450)    | (\$1,042,236)      | -14                              |
| Electric Utilities                | (\$3,875,352)         | (\$743,226)      | (\$357,121)        | -2                               |
| Gas Utilities                     | (\$1,999,305)         | (\$256,071)      | (\$125,911)        | -1                               |
| Trade                             | (\$77,296,991)        | (\$54,400,364)   | (\$33,279,943)     | -1,098                           |
| Finance, Insurance, & Real Estate | (\$34,364,150)        | (\$12,648,060)   | (\$4,733,442)      | -63                              |
| Other Services                    | (\$59,989,590)        | (\$36,046,294)   | (\$31,143,425)     | -711                             |
| Government Enterprises            | (\$1,253,487)         | (\$764,602)      | (\$610,780)        | -13                              |
| Total                             | (\$314,771,130)       | (\$154,115,953)  | (\$104,599,529)    | -2,602                           |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

### **APPENDIX M**

### Potential Impact of Efficiency Gains Stemming from TTC-35 on Texas



# Table M.1The Gross Potential Impact of Efficiency Gains from Short-Term TTC-35Construction Projects on Business Activity in TexasDetailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$142,204,064         | \$44,690,985     | \$23,719,536       | 1,773                            |
| Metal Mining                      | \$14,165,169          | \$5,823,738      | \$4,988,475        | 93                               |
| Coal Mining                       | \$30,121,549          | \$5,571,745      | \$8,183,471        | 137                              |
| Crude Petroleum & Natural Gas     | \$150,183,591         | \$36,355,045     | \$14,920,076       | 60                               |
| Nonmetallic Mineral Mining        | \$13,007,528          | \$4,493,701      | \$3,385,875        | 87                               |
| Construction                      | \$352,172,526         | \$148,386,088    | \$119,962,555      | 2,557                            |
| Food & Kindred Products           | \$158,676,840         | \$33,897,090     | \$17,655,767       | 468                              |
| Tobacco Manufactures              | \$4,756               | \$773            | \$583              | 0                                |
| Textile Mill products             | \$5,765,859           | \$1,241,179      | \$1,174,419        | 32                               |
| Apparel & Other Textile Products  | \$17,185,512          | \$8,205,213      | \$4,581,535        | 137                              |
| Lumber & Wood Products            | \$11,374,718          | \$4,122,239      | \$2,760,557        | 83                               |
| Furniture & Fixtures              | \$85,900              | \$26,362         | \$23,505           | 1                                |
| Paper & Allied Products           | \$15,937,046          | \$5,463,754      | \$3,183,017        | 58                               |
| Printing & Publishing             | \$21,886,414          | \$11,800,633     | \$7,097,542        | 142                              |
| Chemicals & Allied Products       | \$55,939,693          | \$11,403,802     | \$8,760,443        | 71                               |
| Petroleum Refining                | \$134,290,152         | \$21,204,682     | \$4,284,470        | 29                               |
| Rubber & Plastic Products         | \$17,022,699          | \$3,785,169      | \$2,968,242        | 41                               |
| Leather & Leather Products        | \$54,901              | \$23,453         | \$14,846           | 0                                |
| Stone, Clay & Glass Products      | \$12,554,417          | \$5,560,045      | \$3,368,253        | 65                               |
| Primary Metals                    | \$62,103,606          | \$16,208,158     | \$14,033,510       | 224                              |
| Fabricated Metal Products         | \$34,162,425          | \$13,753,436     | \$9,229,981        | 205                              |
| Machinery, Except Electrical      | \$63,323,441          | \$20,257,830     | \$18,282,947       | 271                              |
| Electrical Machinery              | \$44,778,570          | \$21,839,566     | \$15,646,430       | 205                              |
| Motor Vehicles                    | \$55,354,202          | \$16,167,186     | \$9,847,300        | 88                               |
| Other Transportation Equipment    | \$46,767,382          | \$21,870,050     | \$14,979,209       | 281                              |
| Instruments                       | \$350,269             | \$100,613        | \$117,292          | 2                                |
| Miscellaneous Manufacturing       | \$275,004             | \$70,092         | \$65,374           | 1                                |
| Transportation & Warehousing      | \$162,022,943         | \$83,430,782     | \$59,848,108       | 1,140                            |
| Communication                     | \$35,813,728          | \$22,772,812     | \$10,708,407       | 146                              |
| Electric Utilities                | \$62,467,575          | \$11,980,206     | \$5,756,505        | 26                               |
| Gas Utilities                     | \$30,674,461          | \$3,928,791      | \$1,931,790        | 9                                |
| Trade                             | \$793,234,974         | \$558,265,868    | \$341,524,484      | 11,266                           |
| Finance, Insurance, & Real Estate | \$352,456,882         | \$129,725,186    | \$48,548,680       | 643                              |
| Other Services                    | \$615,632,473         | \$369,918,670    | \$319,603,846      | 7,297                            |
| Government Enterprises            | \$12,860,724          | \$7,844,779      | \$6,266,573        | 138                              |
| Total                             | \$3,524,911,994       | \$1,650,189,721  | \$1,107,423,603    | 27,776                           |

Note: All monetary values are in constant 2005 dollars.

#### Table M.2 The Gross Potential Impact of Efficiency Gains from Mid-Term TTC-35 Construction Projects on Business Activity in Texas Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$6,739,751           | \$2,118,126      | \$1,124,186        | 84                               |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | \$7,090,108           | \$1,716,307      | \$704,371          | 3                                |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | \$16,867,245          | \$7,106,927      | \$5,745,587        | 122                              |
| Food & Kindred Products           | \$7,526,122           | \$1,607,756      | \$837,422          | 22                               |
| Tobacco Manufactures              | \$227                 | \$37             | \$28               | 0                                |
| Textile Mill products             | \$273,484             | \$58,871         | \$55,705           | 2                                |
| Apparel & Other Textile Products  | \$820,611             | \$391,800        | \$218,769          | 7                                |
| Lumber & Wood Products            | \$541,994             | \$196,420        | \$131,538          | 4                                |
| Furniture & Fixtures              | \$4,093               | \$1,256          | \$1,120            | 0                                |
| Paper & Allied Products           | \$757,713             | \$259,769        | \$151,334          | 3                                |
| Printing & Publishing             | \$1,042,364           | \$562,018        | \$338,028          | 7                                |
| Chemicals & Allied Products       | \$2,654,812           | \$541,207        | \$415,757          | 3                                |
| Petroleum Refining                | \$6,359,260           | \$1,004,140      | \$202,889          | 1                                |
| Rubber & Plastic Products         | \$809,480             | \$179,996        | \$141,149          | 2                                |
| Leather & Leather Products        | \$2,630               | \$1,123          | \$711              | 0                                |
| Stone, Clay & Glass Products      | \$600,353             | \$265,882        | \$161,070          | 3                                |
| Primary Metals                    | \$2,942,954           | \$768,069        | \$665,017          | 11                               |
| Fabricated Metal Products         | \$1,625,990           | \$654,607        | \$439,309          | 10                               |
| Machinery, Except Electrical      | \$3,019,930           | \$966,107        | \$871,924          | 13                               |
| Electrical Machinery              | \$2,126,975           | \$1,037,376      | \$743,203          | 10                               |
| Motor Vehicles                    | \$2,638,961           | \$770,756        | \$469,461          | 4                                |
| Other Transportation Equipment    | \$2,227,562           | \$1,041,685      | \$713,470          | 13                               |
| Instruments                       | \$16,641              | \$4,780          | \$5,572            | 0                                |
| Miscellaneous Manufacturing       | \$13,115              | \$3,343          | \$3,118            | 0                                |
| Transportation & Warehousing      | \$7,795,129           | \$4,013,961      | \$2,879,368        | 55                               |
| Communication                     | \$1,695,472           | \$1,078,097      | \$506,951          | 7                                |
| Electric Utilities                | \$2,148,642           | \$412,073        | \$198,001          | 1                                |
| Gas Utilities                     | \$1,452,350           | \$186,017        | \$91,465           | 0                                |
| Trade                             | \$37,728,821          | \$26,552,930     | \$16,244,009       | 536                              |
| Finance, Insurance, & Real Estate | \$16,799,981          | \$6,183,397      | \$2,314,090        | 31                               |
| Other Services                    | \$29,279,798          | \$17,593,523     | \$15,200,524       | 347                              |
| Government Enterprises            | \$612,213             | \$373,437        | \$298,310          | 7                                |
| Total                             | \$164,214,776         | \$77,651,792     | \$51,873,454       | 1,307                            |

Note: All monetary values are in constant 2005 dollars.

# Table M.3The Gross Potential Impact of Efficiency Gains from Long-Term TTC-35Construction Projects on Business Activity in TexasDetailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$42,085,998          | \$13,226,519     | \$7,019,914        | 525                              |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | \$44,273,787          | \$10,717,386     | \$4,398,405        | 18                               |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | \$105,326,572         | \$44,378,811     | \$35,877,997       | 765                              |
| Food & Kindred Products           | \$46,996,451          | \$10,039,543     | \$5,229,234        | 139                              |
| Tobacco Manufactures              | \$1,416               | \$230            | \$174              | 0                                |
| Textile Mill products             | \$1,707,756           | \$367,617        | \$347,844          | 10                               |
| Apparel & Other Textile Products  | \$5,124,258           | \$2,446,574      | \$1,366,091        | 41                               |
| Lumber & Wood Products            | \$3,384,450           | \$1,226,537      | \$821,380          | 25                               |
| Furniture & Fixtures              | \$25,561              | \$7,844          | \$6,994            | 0                                |
| Paper & Allied Products           | \$4,731,494           | \$1,622,115      | \$944,995          | 17                               |
| Printing & Publishing             | \$6,508,984           | \$3,509,489      | \$2,110,797        | 42                               |
| Chemicals & Allied Products       | \$16,577,825          | \$3,379,537      | \$2,596,172        | 21                               |
| Petroleum Refining                | \$39,710,044          | \$6,270,295      | \$1,266,932        | 9                                |
| Rubber & Plastic Products         | \$5,054,751           | \$1,123,975      | \$881,395          | 12                               |
| Leather & Leather Products        | \$16,423              | \$7,015          | \$4,441            | 0                                |
| Stone, Clay & Glass Products      | \$3,748,873           | \$1,660,285      | \$1,005,794        | 19                               |
| Primary Metals                    | \$18,377,110          | \$4,796,164      | \$4,152,663        | 66                               |
| Fabricated Metal Products         | \$10,153,406          | \$4,087,655      | \$2,743,240        | 61                               |
| Machinery, Except Electrical      | \$18,857,782          | \$6,032,801      | \$5,444,679        | 81                               |
| Electrical Machinery              | \$13,281,775          | \$6,477,835      | \$4,640,889        | 61                               |
| Motor Vehicles                    | \$16,478,844          | \$4,812,942      | \$2,931,523        | 26                               |
| Other Transportation Equipment    | \$13,909,888          | \$6,504,746      | \$4,455,223        | 84                               |
| Instruments                       | \$103,911             | \$29,848         | \$34,796           | 1                                |
| Miscellaneous Manufacturing       | \$81,894              | \$20,873         | \$19,468           | 0                                |
| Transportation & Warehousing      | \$48,676,249          | \$25,064,953     | \$17,980,055       | 342                              |
| Communication                     | \$10,587,283          | \$6,732,117      | \$3,165,628        | 43                               |
| Electric Utilities                | \$13,417,075          | \$2,573,164      | \$1,236,409        | 6                                |
| Gas Utilities                     | \$9,069,117           | \$1,161,574      | \$571,147          | 3                                |
| Trade                             | \$235,595,525         | \$165,808,297    | \$101,434,811      | 3,346                            |
| Finance, Insurance, & Real Estate | \$104,906,548         | \$38,611,876     | \$14,450,206       | 191                              |
| Other Services                    | \$182,836,071         | \$109,861,775    | \$94,918,826       | 2,167                            |
| Government Enterprises            | \$3,822,929           | \$2,331,908      | \$1,862,777        | 41                               |
| Total                             | \$1,025,430,047       | \$484,892,301    | \$323,920,899      | 8,160                            |

Note: All monetary values are in constant 2005 dollars.

#### Table M.4 The Total Gross Potential Impact of Efficiency Gains Associated with TTC-35 Construction Projects on Business Activity in Texas Detailed Sectoral Results

|                                   |                 |                 |                 | Employment |
|-----------------------------------|-----------------|-----------------|-----------------|------------|
|                                   | Total           | Gross           | Personal        | (Person-   |
| Sector                            | Expenditures    | Product         | Income          | Years)     |
| Agriculture, Forestry & Fisheries | \$191,029,812   | \$60,035,629    | \$31,863,636    | 2,382      |
| Metal Mining                      | \$14,165,169    | \$5,823,738     | \$4,988,475     | 93         |
| Coal Mining                       | \$30,121,549    | \$5,571,745     | \$8,183,471     | 137        |
| Crude Petroleum & Natural Gas     | \$201,547,486   | \$48,788,739    | \$20,022,852    | 80         |
| Nonmetallic Mineral Mining        | \$13,007,528    | \$4,493,701     | \$3,385,875     | 87         |
| Construction                      | \$474,366,343   | \$199,871,826   | \$161,586,138   | 3,444      |
| Food & Kindred Products           | \$213,199,413   | \$45,544,389    | \$23,722,424    | 629        |
| Tobacco Manufactures              | \$6,400         | \$1,039         | \$784           | 0          |
| Textile Mill products             | \$7,747,099     | \$1,667,667     | \$1,577,968     | 43         |
| Apparel & Other Textile Products  | \$23,130,381    | \$11,043,588    | \$6,166,395     | 184        |
| Lumber & Wood Products            | \$15,301,162    | \$5,545,196     | \$3,713,475     | 112        |
| Furniture & Fixtures              | \$115,554       | \$35,463        | \$31,619        | 1          |
| Paper & Allied Products           | \$21,426,253    | \$7,345,638     | \$4,279,346     | 78         |
| Printing & Publishing             | \$29,437,762    | \$15,872,140    | \$9,546,368     | 191        |
| Chemicals & Allied Products       | \$75,172,330    | \$15,324,546    | \$11,772,372    | 95         |
| Petroleum Refining                | \$180,359,455   | \$28,479,117    | \$5,754,291     | 40         |
| Rubber & Plastic Products         | \$22,886,930    | \$5,089,140     | \$3,990,785     | 54         |
| Leather & Leather Products        | \$73,954        | \$31,591        | \$19,997        | 0          |
| Stone, Clay & Glass Products      | \$16,903,644    | \$7,486,212     | \$4,535,117     | 87         |
| Primary Metals                    | \$83,423,669    | \$21,772,391    | \$18,851,190    | 300        |
| Fabricated Metal Products         | \$45,941,821    | \$18,495,697    | \$12,412,531    | 276        |
| Machinery, Except Electrical      | \$85,201,153    | \$27,256,738    | \$24,599,550    | 365        |
| Electrical Machinery              | \$60,187,319    | \$29,354,777    | \$21,030,522    | 276        |
| Motor Vehicles                    | \$74,472,007    | \$21,750,884    | \$13,248,284    | 118        |
| Other Transportation Equipment    | \$62,904,832    | \$29,416,482    | \$20,147,903    | 378        |
| Instruments                       | \$470,821       | \$135,241       | \$157,660       | 3          |
| Miscellaneous Manufacturing       | \$370,012       | \$94,307        | \$87,960        | 1          |
| Transportation & Warehousing      | \$218,494,321   | \$112,509,696   | \$80,707,531    | 1,537      |
| Communication                     | \$48,096,484    | \$30,583,026    | \$14,380,986    | 196        |
| Electric Utilities                | \$78,033,292    | \$14,965,443    | \$7,190,915     | 33         |
| Gas Utilities                     | \$41,195,927    | \$5,276,383     | \$2,594,402     | 12         |
| Trade                             | \$1,066,559,320 | \$750,627,095   | \$459,203,304   | 15,149     |
| Finance, Insurance, & Real Estate | \$474,163,411   | \$174,520,459   | \$65,312,975    | 865        |
| Other Services                    | \$827,748,342   | \$497,373,968   | \$429,723,195   | 9,812      |
| Government Enterprises            | \$17,295,866    | \$10,550,125    | \$8,427,660     | 185        |
| Total                             | \$4,714,556,818 | \$2,212,733,815 | \$1,483,217,956 | 37,243     |

Note: All monetary values are in constant 2005 dollars.

# Table M.5The Offsetting Potential Impact of Foregone Efficiency Gains from AlternativeHighway Construction Projects Stemming from Use of TxDOT Funds for TTC-35Construction on Business Activity in Texas:Short-Term Effects—Detailed Sectoral Results

|                                   | Total           | Gross           | Personal       | Employment<br>(Person- |
|-----------------------------------|-----------------|-----------------|----------------|------------------------|
| Sector                            | Expenditures    | Product         | Income         | Years)                 |
| Agriculture, Forestry & Fisheries | (\$10,305,987)  | (\$3,238,900)   | (\$1,719,031)  | -129                   |
| Metal Mining                      | (\$1,026,595)   | (\$422,065)     | (\$361,531)    | -7                     |
| Coal Mining                       | (\$2,183,006)   | (\$403,802)     | (\$593,083)    | -10                    |
| Crude Petroleum & Natural Gas     | (\$10,884,289)  | (\$2,634,767)   | (\$1,081,306)  | -4                     |
| Nonmetallic Mineral Mining        | (\$942,697)     | (\$325,673)     | (\$245,385)    | -6                     |
| Construction                      | (\$25,523,078)  | (\$10,754,018)  | (\$8,694,073)  | -185                   |
| Food & Kindred Products           | (\$11,499,822)  | (\$2,456,631)   | (\$1,279,570)  | -34                    |
| Tobacco Manufactures              | (\$345)         | (\$56)          | (\$42)         | 0                      |
| Textile Mill products             | (\$417,870)     | (\$89,952)      | (\$85,114)     | -2                     |
| Apparel & Other Textile Products  | (\$1,245,489)   | (\$594,658)     | (\$332,039)    | -10                    |
| Lumber & Wood Products            | (\$824,363)     | (\$298,752)     | (\$200,066)    | -6                     |
| Furniture & Fixtures              | (\$6,225)       | (\$1,911)       | (\$1,703)      | 0                      |
| Paper & Allied Products           | (\$1,155,009)   | (\$395,976)     | (\$230,684)    | -4                     |
| Printing & Publishing             | (\$1,586,179)   | (\$855,230)     | (\$514,382)    | -10                    |
| Chemicals & Allied Products       | (\$4,054,130)   | (\$826,470)     | (\$634,898)    | -5                     |
| Petroleum Refining                | (\$9,732,440)   | (\$1,536,772)   | (\$310,509)    | -2                     |
| Rubber & Plastic Products         | (\$1,233,690)   | (\$274,323)     | (\$215,118)    | -3                     |
| Leather & Leather Products        | (\$3,979)       | (\$1,700)       | (\$1,076)      | 0                      |
| Stone, Clay & Glass Products      | (\$909,859)     | (\$402,954)     | (\$244,108)    | -5                     |
| Primary Metals                    | (\$4,500,848)   | (\$1,174,657)   | (\$1,017,054)  | -16                    |
| Fabricated Metal Products         | (\$2,475,861)   | (\$996,756)     | (\$668,926)    | -15                    |
| Machinery, Except Electrical      | (\$4,589,254)   | (\$1,468,150)   | (\$1,325,024)  | -20                    |
| Electrical Machinery              | (\$3,245,247)   | (\$1,582,784)   | (\$1,133,947)  | -15                    |
| Motor Vehicles                    | (\$4,011,697)   | (\$1,171,688)   | (\$713,666)    | -6                     |
| Other Transportation Equipment    | (\$3,389,383)   | (\$1,584,993)   | (\$1,085,592)  | -20                    |
| Instruments                       | (\$25,385)      | (\$7,292)       | (\$8,501)      | 0                      |
| Miscellaneous Manufacturing       | (\$19,930)      | (\$5,080)       | (\$4,738)      | 0                      |
| Transportation & Warehousing      | (\$11,742,325)  | (\$6,046,498)   | (\$4,337,385)  | -83                    |
| Communication                     | (\$2,595,536)   | (\$1,650,419)   | (\$776,073)    | -11                    |
| Electric Utilities                | (\$4,527,226)   | (\$868,244)     | (\$417,192)    | -2                     |
| Gas Utilities                     | (\$2,223,077)   | (\$284,732)     | (\$140,003)    | -1                     |
| Trade                             | (\$57,488,295)  | (\$40,459,326)  | (\$24,751,380) | -817                   |
| Finance, Insurance, & Real Estate | (\$25,543,686)  | (\$9,401,602)   | (\$3,518,479)  | -47                    |
| Other Services                    | (\$44,616,869)  | (\$26,809,198)  | (\$23,162,721) | -529                   |
| Government Enterprises            | (\$932,058)     | (\$568,536)     | (\$454,159)    | -10                    |
| Total                             | (\$255,461,731) | (\$119,594,567) | (\$80,258,557) | -2,013                 |

Note: All monetary values are in constant 2005 dollars.

#### Table M.6

#### The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for TTC-35 Construction on Business Activity in Texas: Mid-Term Effects—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$488,451)           | (\$153,507)      | (\$81,473)         | -6                               |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | (\$513,843)           | (\$124,386)      | (\$51,048)         | 0                                |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | (\$1,222,424)         | (\$515,062)      | (\$416,401)        | -9                               |
| Food & Kindred Products           | (\$545,442)           | (\$116,519)      | (\$60,691)         | -2                               |
| Tobacco Manufactures              | (\$16)                | (\$3)            | (\$2)              | 0                                |
| Textile Mill products             | (\$19,820)            | (\$4,267)        | (\$4,037)          | 0                                |
| Apparel & Other Textile Products  | (\$59,472)            | (\$28,395)       | (\$15,855)         | 0                                |
| Lumber & Wood Products            | (\$39,280)            | (\$14,235)       | (\$9,533)          | 0                                |
| Furniture & Fixtures              | (\$297)               | (\$91)           | (\$81)             | 0                                |
| Paper & Allied Products           | (\$54,914)            | (\$18,826)       | (\$10,968)         | 0                                |
| Printing & Publishing             | (\$75,543)            | (\$40,731)       | (\$24,498)         | 0                                |
| Chemicals & Allied Products       | (\$192,403)           | (\$39,223)       | (\$30,131)         | 0                                |
| Petroleum Refining                | (\$460,876)           | (\$72,773)       | (\$14,704)         | 0                                |
| Rubber & Plastic Products         | (\$58,666)            | (\$13,045)       | (\$10,229)         | 0                                |
| Leather & Leather Products        | (\$191)               | (\$81)           | (\$52)             | 0                                |
| Stone, Clay & Glass Products      | (\$43,510)            | (\$19,269)       | (\$11,673)         | 0                                |
| Primary Metals                    | (\$213,285)           | (\$55,664)       | (\$48,196)         | -1                               |
| Fabricated Metal Products         | (\$117,841)           | (\$47,441)       | (\$31,838)         | -1                               |
| Machinery, Except Electrical      | (\$218,864)           | (\$70,017)       | (\$63,191)         | -1                               |
| Electrical Machinery              | (\$154,149)           | (\$75,182)       | (\$53,862)         | -1                               |
| Motor Vehicles                    | (\$191,254)           | (\$55,859)       | (\$34,023)         | 0                                |
| Other Transportation Equipment    | (\$161,439)           | (\$75,494)       | (\$51,707)         | -1                               |
| Instruments                       | (\$1,206)             | (\$346)          | (\$404)            | 0                                |
| Miscellaneous Manufacturing       | (\$950)               | (\$242)          | (\$226)            | 0                                |
| Transportation & Warehousing      | (\$564,938)           | (\$290,905)      | (\$208,677)        | -4                               |
| Communication                     | (\$122,876)           | (\$78,133)       | (\$36,740)         | 0                                |
| Electric Utilities                | (\$155,719)           | (\$29,864)       | (\$14,350)         | 0                                |
| Gas Utilities                     | (\$105,256)           | (\$13,481)       | (\$6,629)          | 0                                |
| Trade                             | (\$2,734,329)         | (\$1,924,376)    | (\$1,177,256)      | -39                              |
| Finance, Insurance, & Real Estate | (\$1,217,549)         | (\$448,131)      | (\$167,710)        | -2                               |
| Other Services                    | (\$2,122,001)         | (\$1,275,059)    | (\$1,101,631)      | -25                              |
| Government Enterprises            | (\$44,369)            | (\$27,064)       | (\$21,619)         | 0                                |
| Total                             | (\$11,901,174)        | (\$5,627,676)    | (\$3,759,436)      | -95                              |

Note: All monetary values are in constant 2005 dollars.

#### Table M.7

#### The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for TTC-35 Construction on Business Activity in Texas: Long-Term Effects—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$3,050,108)         | (\$958,568)      | (\$508,756)        | -38                              |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | (\$3,208,664)         | (\$776,723)      | (\$318,767)        | -1                               |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | (\$7,633,356)         | (\$3,216,275)    | (\$2,600,194)      | -55                              |
| Food & Kindred Products           | (\$3,405,984)         | (\$727,598)      | (\$378,979)        | -10                              |
| Tobacco Manufactures              | (\$103)               | (\$17)           | (\$13)             | 0                                |
| Textile Mill products             | (\$123,767)           | (\$26,642)       | (\$25,209)         | -1                               |
| Apparel & Other Textile Products  | (\$371,371)           | (\$177,311)      | (\$99,005)         | -3                               |
| Lumber & Wood Products            | (\$245,282)           | (\$88,891)       | (\$59,528)         | -2                               |
| Furniture & Fixtures              | (\$1,852)             | (\$569)          | (\$507)            | 0                                |
| Paper & Allied Products           | (\$342,907)           | (\$117,560)      | (\$68,487)         | -1                               |
| Printing & Publishing             | (\$471,727)           | (\$254,344)      | (\$152,976)        | -3                               |
| Chemicals & Allied Products       | (\$1,201,448)         | (\$244,926)      | (\$188,153)        | -2                               |
| Petroleum Refining                | (\$2,877,915)         | (\$454,428)      | (\$91,819)         | -1                               |
| Rubber & Plastic Products         | (\$366,334)           | (\$81,458)       | (\$63,878)         | -1                               |
| Leather & Leather Products        | (\$1,190)             | (\$508)          | (\$322)            | 0                                |
| Stone, Clay & Glass Products      | (\$271,693)           | (\$120,326)      | (\$72,893)         | -1                               |
| Primary Metals                    | (\$1,331,848)         | (\$347,593)      | (\$300,957)        | -5                               |
| Fabricated Metal Products         | (\$735,850)           | (\$296,246)      | (\$198,811)        | -4                               |
| Machinery, Except Electrical      | (\$1,366,684)         | (\$437,217)      | (\$394,593)        | -6                               |
| Electrical Machinery              | (\$962,573)           | (\$469,470)      | (\$336,340)        | -4                               |
| Motor Vehicles                    | (\$1,194,275)         | (\$348,809)      | (\$212,457)        | -2                               |
| Other Transportation Equipment    | (\$1,008,094)         | (\$471,420)      | (\$322,884)        | -6                               |
| Instruments                       | (\$7,531)             | (\$2,163)        | (\$2,522)          | 0                                |
| Miscellaneous Manufacturing       | (\$5,935)             | (\$1,513)        | (\$1,411)          | 0                                |
| Transportation & Warehousing      | (\$3,527,725)         | (\$1,816,538)    | (\$1,303,073)      | -25                              |
| Communication                     | (\$767,295)           | (\$487,898)      | (\$229,423)        | -3                               |
| Electric Utilities                | (\$972,379)           | (\$186,486)      | (\$89,607)         | 0                                |
| Gas Utilities                     | (\$657,268)           | (\$84,183)       | (\$41,393)         | 0                                |
| Trade                             | (\$17,074,367)        | (\$12,016,662)   | (\$7,351,308)      | -243                             |
| Finance, Insurance, & Real Estate | (\$7,602,916)         | (\$2,798,327)    | (\$1,047,253)      | -14                              |
| Other Services                    | (\$13,250,719)        | (\$7,962,037)    | (\$6,879,073)      | -157                             |
| Government Enterprises            | (\$277,060)           | (\$169,001)      | (\$135,001)        | -3                               |
| Total                             | (\$74,316,220)        | (\$35,141,708)   | (\$23,475,591)     | -591                             |

Note: All monetary values are in constant 2005 dollars.

#### Table M.8 The Total Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for TTC-35 Construction on Business Activity in Texas: Total Effects—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$13,844,546)        | (\$4,350,975)    | (\$2,309,260)      | -173                             |
| Metal Mining                      | (\$1,026,595)         | (\$422,065)      | (\$361,531)        | -7                               |
| Coal Mining                       | (\$2,183,006)         | (\$403,802)      | (\$593,083)        | -10                              |
| Crude Petroleum & Natural Gas     | (\$14,606,796)        | (\$3,535,877)    | (\$1,451,121)      | -6                               |
| Nonmetallic Mineral Mining        | (\$942,697)           | (\$325,673)      | (\$245,385)        | -6                               |
| Construction                      | (\$34,378,858)        | (\$14,485,355)   | (\$11,710,668)     | -250                             |
| Food & Kindred Products           | (\$15,451,248)        | (\$3,300,749)    | (\$1,719,240)      | -46                              |
| Tobacco Manufactures              | (\$464)               | (\$75)           | (\$57)             | 0                                |
| Textile Mill products             | (\$561,457)           | (\$120,861)      | (\$114,360)        | -3                               |
| Apparel & Other Textile Products  | (\$1,676,333)         | (\$800,364)      | (\$446,898)        | -13                              |
| Lumber & Wood Products            | (\$1,108,925)         | (\$401,878)      | (\$269,128)        | -8                               |
| Furniture & Fixtures              | (\$8,375)             | (\$2,570)        | (\$2,292)          | 0                                |
| Paper & Allied Products           | (\$1,552,830)         | (\$532,362)      | (\$310,138)        | -6                               |
| Printing & Publishing             | (\$2,133,449)         | (\$1,150,305)    | (\$691,856)        | -14                              |
| Chemicals & Allied Products       | (\$5,447,981)         | (\$1,110,619)    | (\$853,182)        | -7                               |
| Petroleum Refining                | (\$13,071,231)        | (\$2,063,973)    | (\$417,032)        | -3                               |
| Rubber & Plastic Products         | (\$1,658,690)         | (\$368,826)      | (\$289,225)        | -4                               |
| Leather & Leather Products        | (\$5,360)             | (\$2,290)        | (\$1,449)          | 0                                |
| Stone, Clay & Glass Products      | (\$1,225,062)         | (\$542,550)      | (\$328,675)        | -6                               |
| Primary Metals                    | (\$6,045,982)         | (\$1,577,915)    | (\$1,366,206)      | -22                              |
| Fabricated Metal Products         | (\$3,329,552)         | (\$1,340,443)    | (\$899,576)        | -20                              |
| Machinery, Except Electrical      | (\$6,174,802)         | (\$1,975,384)    | (\$1,782,809)      | -26                              |
| Electrical Machinery              | (\$4,361,969)         | (\$2,127,435)    | (\$1,524,150)      | -20                              |
| Motor Vehicles                    | (\$5,397,226)         | (\$1,576,357)    | (\$960,146)        | -9                               |
| Other Transportation Equipment    | (\$4,558,916)         | (\$2,131,907)    | (\$1,460,183)      | -27                              |
| Instruments                       | (\$34,122)            | (\$9,801)        | (\$11,426)         | 0                                |
| Miscellaneous Manufacturing       | (\$26,816)            | (\$6,835)        | (\$6,375)          | 0                                |
| Transportation & Warehousing      | (\$15,834,988)        | (\$8,153,940)    | (\$5,849,135)      | -111                             |
| Communication                     | (\$3,485,707)         | (\$2,216,450)    | (\$1,042,236)      | -14                              |
| Electric Utilities                | (\$5,655,324)         | (\$1,084,594)    | (\$521,149)        | -2                               |
| Gas Utilities                     | (\$2,985,602)         | (\$382,396)      | (\$188,025)        | -1                               |
| Trade                             | (\$77,296,991)        | (\$54,400,364)   | (\$33,279,943)     | -1,098                           |
| Finance, Insurance, & Real Estate | (\$34,364,150)        | (\$12,648,060)   | (\$4,733,442)      | -63                              |
| Other Services                    | (\$59,989,590)        | (\$36,046,294)   | (\$31,143,425)     | -711                             |
| Government Enterprises            | (\$1,253,487)         | (\$764,602)      | (\$610,780)        | -13                              |
| Total                             | (\$341,679,125)       | (\$160,363,950)  | (\$107,493,585)    | -2,699                           |

Note: All monetary values are in constant 2005 dollars.

APPENDIX N

### Potential Impact of Efficiency Gains Stemming from TTC-69 on the TTC-69 Study Area



# Table N.1The Gross Potential Impact of Efficiency Gains from TTC-69Construction on Business Activity in the TTC-69 Study Area\*Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$190,740,847         | \$59,944,815     | \$31,815,437       | 2,379                            |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | \$342,561,519         | \$82,924,102     | \$34,031,973       | 137                              |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | \$756,549,299         | \$318,768,167    | \$257,707,742      | 5,493                            |
| Food & Kindred Products           | \$199,654,110         | \$42,650,795     | \$22,215,255       | 589                              |
| Tobacco Manufactures              | \$10,960              | \$1,780          | \$1,343            | 0                                |
| Textile Mill products             | \$2,267,034           | \$488,010        | \$461,761          | 13                               |
| Apparel & Other Textile Products  | \$16,246,353          | \$7,756,812      | \$4,331,162        | 129                              |
| Lumber & Wood Products            | \$24,074,691          | \$8,724,755      | \$5,842,744        | 177                              |
| Furniture & Fixtures              | \$94,369              | \$28,961         | \$25,822           | 1                                |
| Paper & Allied Products           | \$20,035,470          | \$6,868,831      | \$4,001,573        | 73                               |
| Printing & Publishing             | \$24,383,914          | \$13,147,225     | \$7,907,456        | 158                              |
| Chemicals & Allied Products       | \$128,268,333         | \$26,148,637     | \$20,087,479       | 162                              |
| Petroleum Refining                | \$307,250,270         | \$48,515,429     | \$9,802,689        | 67                               |
| Rubber & Plastic Products         | \$35,564,850          | \$7,908,204      | \$6,201,430        | 85                               |
| Leather & Leather Products        | \$13,391              | \$5,720          | \$3,621            | 0                                |
| Stone, Clay & Glass Products      | \$17,556,007          | \$7,775,128      | \$4,710,141        | 91                               |
| Primary Metals                    | \$81,920,651          | \$21,380,125     | \$18,511,554       | 295                              |
| Fabricated Metal Products         | \$78,560,394          | \$31,627,594     | \$21,225,395       | 472                              |
| Machinery, Except Electrical      | \$131,978,131         | \$42,221,182     | \$38,105,148       | 565                              |
| Electrical Machinery              | \$50,709,551          | \$24,732,246     | \$17,718,821       | 232                              |
| Motor Vehicles                    | \$47,202,434          | \$13,786,317     | \$8,397,132        | 75                               |
| Other Transportation Equipment    | \$38,643,422          | \$18,071,005     | \$12,377,172       | 232                              |
| Instruments                       | \$430,601             | \$123,688        | \$144,192          | 3                                |
| Miscellaneous Manufacturing       | \$542,456             | \$138,259        | \$128,954          | 2                                |
| Transportation & Warehousing      | \$376,624,885         | \$193,936,168    | \$139,117,871      | 2,649                            |
| Communication                     | \$39,485,745          | \$25,107,731     | \$11,806,350       | 161                              |
| Electric Utilities                | \$103,812,526         | \$19,909,457     | \$9,566,520        | 43                               |
| Gas Utilities                     | \$70,170,875          | \$8,987,500      | \$4,419,162        | 20                               |
| Trade                             | \$1,416,623,635       | \$996,996,664    | \$609,922,245      | 20,121                           |
| Finance, Insurance, & Real Estate | \$607,324,760         | \$223,531,789    | \$83,655,099       | 1,108                            |
| Other Services                    | \$1,236,296,278       | \$742,860,546    | \$641,819,693      | 14,654                           |
| Government Enterprises            | \$23,686,444          | \$14,448,247     | \$11,541,561       | 253                              |
| Total                             | \$6,369,284,209       | \$3,009,515,889  | \$2,037,604,496    | 50,437                           |

\*The TTC-69 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

#### Table N.2 The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for TTC-69 Construction on Business Activity in the TTC-69 Study Area\* Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$13,823,604)        | (\$4,344,394)    | (\$2,305,767)      | -172                             |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | (\$24,826,537)        | (\$6,009,777)    | (\$2,466,407)      | -10                              |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | (\$54,829,566)        | (\$23,102,156)   | (\$18,676,911)     | -398                             |
| Food & Kindred Products           | (\$14,469,577)        | (\$3,091,041)    | (\$1,610,011)      | -43                              |
| Tobacco Manufactures              | (\$794)               | (\$129)          | (\$97)             | 0                                |
| Textile Mill products             | (\$164,299)           | (\$35,368)       | (\$33,465)         | -1                               |
| Apparel & Other Textile Products  | (\$1,177,426)         | (\$562,161)      | (\$313,893)        | -9                               |
| Lumber & Wood Products            | (\$1,744,770)         | (\$632,311)      | (\$423,442)        | -13                              |
| Furniture & Fixtures              | (\$6,839)             | (\$2,099)        | (\$1,871)          | 0                                |
| Paper & Allied Products           | (\$1,452,035)         | (\$497,806)      | (\$290,007)        | -5                               |
| Printing & Publishing             | (\$1,767,181)         | (\$952,822)      | (\$573,079)        | -11                              |
| Chemicals & Allied Products       | (\$9,296,019)         | (\$1,895,076)    | (\$1,455,804)      | -12                              |
| Petroleum Refining                | (\$22,267,417)        | (\$3,516,069)    | (\$710,432)        | -5                               |
| Rubber & Plastic Products         | (\$2,577,499)         | (\$573,133)      | (\$449,438)        | -6                               |
| Leather & Leather Products        | (\$970)               | (\$415)          | (\$262)            | 0                                |
| Stone, Clay & Glass Products      | (\$1,272,340)         | (\$563,489)      | (\$341,359)        | -7                               |
| Primary Metals                    | (\$5,937,054)         | (\$1,549,487)    | (\$1,341,592)      | -21                              |
| Fabricated Metal Products         | (\$5,693,525)         | (\$2,292,154)    | (\$1,538,273)      | -34                              |
| Machinery, Except Electrical      | (\$9,564,880)         | (\$3,059,905)    | (\$2,761,603)      | -41                              |
| Electrical Machinery              | (\$3,675,085)         | (\$1,792,426)    | (\$1,284,140)      | -17                              |
| Motor Vehicles                    | (\$3,420,913)         | (\$999,139)      | (\$608,567)        | -5                               |
| Other Transportation Equipment    | (\$2,800,613)         | (\$1,309,664)    | (\$897,014)        | -17                              |
| Instruments                       | (\$31,207)            | (\$8,964)        | (\$10,450)         | 0                                |
| Miscellaneous Manufacturing       | (\$39,314)            | (\$10,020)       | (\$9,346)          | 0                                |
| Transportation & Warehousing      | (\$27,295,219)        | (\$14,055,179)   | (\$10,082,320)     | -192                             |
| Communication                     | (\$2,861,659)         | (\$1,819,638)    | (\$855,644)        | -12                              |
| Electric Utilities                | (\$7,523,628)         | (\$1,442,902)    | (\$693,317)        | -3                               |
| Gas Utilities                     | (\$5,085,509)         | (\$651,353)      | (\$320,271)        | -1                               |
| Trade                             | (\$102,667,280)       | (\$72,255,561)   | (\$44,203,031)     | -1,458                           |
| Finance, Insurance, & Real Estate | (\$44,014,782)        | (\$16,200,069)   | (\$6,062,755)      | -80                              |
| Other Services                    | (\$89,598,375)        | (\$53,837,498)   | (\$46,514,741)     | -1,062                           |
| Government Enterprises            | (\$1,716,633)         | (\$1,047,111)    | (\$836,454)        | -18                              |
| Total                             | (\$461,602,552)       | (\$218,109,315)  | (\$147,671,764)    | -3,655                           |

\*The TTC-69 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

### **APPENDIX O**

### Potential Impact of Efficiency Gains Stemming from TTC-69 on Texas



#### Table O.1 The Gross Potential Impact of Efficiency Gains from TTC-69 Construction on Business Activity in Texas Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$325,633,844         | \$102,338,124    | \$54,315,493       | 4,061                            |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | \$342,561,519         | \$82,924,102     | \$34,031,973       | 137                              |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | \$814,947,925         | \$343,374,129    | \$277,600,402      | 5,917                            |
| Food & Kindred Products           | \$363,627,707         | \$77,679,397     | \$40,460,386       | 1,072                            |
| Tobacco Manufactures              | \$10,960              | \$1,780          | \$1,343            | 0                                |
| Textile Mill products             | \$13,213,494          | \$2,844,382      | \$2,691,390        | 74                               |
| Apparel & Other Textile Products  | \$39,648,146          | \$18,929,986     | \$10,569,913       | 316                              |
| Lumber & Wood Products            | \$26,186,653          | \$9,490,137      | \$6,355,301        | 192                              |
| Furniture & Fixtures              | \$197,770             | \$60,694         | \$54,117           | 2                                |
| Paper & Allied Products           | \$36,609,196          | \$12,550,859     | \$7,311,750        | 134                              |
| Printing & Publishing             | \$50,362,245          | \$27,154,122     | \$16,331,965       | 327                              |
| Chemicals & Allied Products       | \$128,268,333         | \$26,148,637     | \$20,087,479       | 162                              |
| Petroleum Refining                | \$307,250,270         | \$48,515,429     | \$9,802,689        | 67                               |
| Rubber & Plastic Products         | \$39,110,344          | \$8,696,581      | \$6,819,656        | 93                               |
| Leather & Leather Products        | \$127,067             | \$54,280         | \$34,360           | 1                                |
| Stone, Clay & Glass Products      | \$29,006,323          | \$12,846,193     | \$7,782,172        | 150                              |
| Primary Metals                    | \$142,190,021         | \$37,109,574     | \$32,130,583       | 512                              |
| Fabricated Metal Products         | \$78,560,394          | \$31,627,594     | \$21,225,395       | 472                              |
| Machinery, Except Electrical      | \$145,909,149         | \$46,677,860     | \$42,127,357       | 625                              |
| Electrical Machinery              | \$102,765,659         | \$50,121,240     | \$35,908,152       | 471                              |
| Motor Vehicles                    | \$127,502,489         | \$37,239,386     | \$22,682,203       | 202                              |
| Other Transportation Equipment    | \$107,625,588         | \$50,329,458     | \$34,471,595       | 646                              |
| Instruments                       | \$803,998             | \$230,944        | \$269,228          | 5                                |
| Miscellaneous Manufacturing       | \$633,639             | \$161,499        | \$150,630          | 2                                |
| Transportation & Warehousing      | \$376,624,885         | \$193,936,168    | \$139,117,871      | 2,649                            |
| Communication                     | \$81,917,453          | \$52,088,706     | \$24,493,552       | 333                              |
| Electric Utilities                | \$103,812,526         | \$19,909,457     | \$9,566,520        | 43                               |
| Gas Utilities                     | \$70,170,875          | \$8,987,500      | \$4,419,162        | 20                               |
| Trade                             | \$1,822,883,624       | \$1,282,915,834  | \$784,836,031      | 25,891                           |
| Finance, Insurance, & Real Estate | \$811,698,054         | \$298,753,369    | \$111,806,212      | 1,481                            |
| Other Services                    | \$1,414,665,578       | \$850,038,346    | \$734,419,607      | 16,769                           |
| Government Enterprises            | \$29,579,315          | \$18,042,778     | \$14,412,948       | 316                              |
| Total                             | \$7,934,105,044       | \$3,751,778,547  | \$2,506,287,434    | 63,140                           |

Note: All monetary values are in constant 2005 dollars.

# Table O.2The Offsetting Potential Impact of Foregone Efficiency Gains from AlternativeHighway Construction Projects Stemming from Use of TxDOT Funds for TTC-69Construction on Business Activity in TexasDetailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$23,599,734)        | (\$7,416,774)    | (\$3,936,419)      | -294                             |
| Metal Mining                      | \$0                   | \$0              | \$0                | 0                                |
| Coal Mining                       | \$0                   | \$0              | \$0                | 0                                |
| Crude Petroleum & Natural Gas     | (\$24,826,537)        | (\$6,009,777)    | (\$2,466,407)      | -10                              |
| Nonmetallic Mineral Mining        | \$0                   | \$0              | \$0                | 0                                |
| Construction                      | (\$59,061,902)        | (\$24,885,430)   | (\$20,118,596)     | -429                             |
| Food & Kindred Products           | (\$26,353,272)        | (\$5,629,676)    | (\$2,932,295)      | -78                              |
| Tobacco Manufactures              | (\$794)               | (\$129)          | (\$97)             | 0                                |
| Textile Mill products             | (\$957,625)           | (\$206,142)      | (\$195,054)        | -5                               |
| Apparel & Other Textile Products  | (\$2,873,429)         | (\$1,371,917)    | (\$766,036)        | -23                              |
| Lumber & Wood Products            | (\$1,897,831)         | (\$687,781)      | (\$460,589)        | -14                              |
| Furniture & Fixtures              | (\$14,333)            | (\$4,399)        | (\$3,922)          | 0                                |
| Paper & Allied Products           | (\$2,653,186)         | (\$909,601)      | (\$529,906)        | -10                              |
| Printing & Publishing             | (\$3,649,914)         | (\$1,967,947)    | (\$1,183,630)      | -24                              |
| Chemicals & Allied Products       | (\$9,296,019)         | (\$1,895,076)    | (\$1,455,804)      | -12                              |
| Petroleum Refining                | (\$22,267,417)        | (\$3,516,069)    | (\$710,432)        | -5                               |
| Rubber & Plastic Products         | (\$2,834,453)         | (\$630,269)      | (\$494,242)        | -7                               |
| Leather & Leather Products        | (\$9,209)             | (\$3,934)        | (\$2,490)          | 0                                |
| Stone, Clay & Glass Products      | (\$2,102,182)         | (\$931,005)      | (\$563,999)        | -11                              |
| Primary Metals                    | (\$10,304,969)        | (\$2,689,450)    | (\$2,328,607)      | -37                              |
| Fabricated Metal Products         | (\$5,693,525)         | (\$2,292,154)    | (\$1,538,273)      | -34                              |
| Machinery, Except Electrical      | (\$10,574,506)        | (\$3,382,895)    | (\$3,053,105)      | -45                              |
| Electrical Machinery              | (\$7,447,758)         | (\$3,632,448)    | (\$2,602,379)      | -34                              |
| Motor Vehicles                    | (\$9,240,516)         | (\$2,698,858)    | (\$1,643,852)      | -15                              |
| Other Transportation Equipment    | (\$7,799,973)         | (\$3,647,538)    | (\$2,498,268)      | -47                              |
| Instruments                       | (\$58,268)            | (\$16,737)       | (\$19,512)         | 0                                |
| Miscellaneous Manufacturing       | (\$45,922)            | (\$11,704)       | (\$10,917)         | 0                                |
| Transportation & Warehousing      | (\$27,295,219)        | (\$14,055,179)   | (\$10,082,320)     | -192                             |
| Communication                     | (\$5,936,822)         | (\$3,775,036)    | (\$1,775,127)      | -24                              |
| Electric Utilities                | (\$7,523,628)         | (\$1,442,902)    | (\$693,317)        | -3                               |
| Gas Utilities                     | (\$5,085,509)         | (\$651,353)      | (\$320,271)        | -1                               |
| Trade                             | (\$132,110,250)       | (\$92,977,045)   | (\$56,879,596)     | -1,876                           |
| Finance, Insurance, & Real Estate | (\$58,826,374)        | (\$21,651,619)   | (\$8,102,957)      | -107                             |
| Other Services                    | (\$102,525,373)       | (\$61,605,018)   | (\$53,225,756)     | -1,215                           |
| Government Enterprises            | (\$2,143,708)         | (\$1,307,618)    | (\$1,044,553)      | -23                              |
| Total                             | (\$575,010,160)       | (\$271,903,481)  | (\$181,638,727)    | -4,576                           |

Note: All monetary values are in constant 2005 dollars.

## APPENDIX P Potential Impact of Efficiency Gains from other TTC-35 Construction, the Total TTC-35 Conceptual Plan, Other TTC-69 Construction, and the Total TTC-69 Conceptual Plan on the Relevant Study Areas



#### Table P.1

#### The Gross Potential Impact of Efficiency Gains from Construction of Other Conceptual Aspects of TTC-35 on Business Activity in the TTC-35 Study Area\* Detailed Sectoral Results

|                                   |                       | -                |                    | Employment         |
|-----------------------------------|-----------------------|------------------|--------------------|--------------------|
| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | (Person-<br>Years) |
| Agriculture, Forestry & Fisheries | \$86,558,191          | \$27,202,955     | \$14,437,845       | 1,079              |
| Metal Mining                      | \$93,151,740          | \$38,297,555     | \$32,804,772       | 612                |
| Coal Mining                       | \$198,082,695         | \$36,640,424     | \$53,815,426       | 903                |
| Crude Petroleum & Natural Gas     | \$88,275,555          | \$21,368,924     | \$8,769,786        | 35                 |
| Nonmetallic Mineral Mining        | \$85,538,968          | \$29,551,081     | \$22,265,893       | 573                |
| Construction                      | \$395,797,863         | \$166,767,400    | \$134,822,904      | 2,874              |
| Food & Kindred Products           | \$186,720,356         | \$39,887,842     | \$20,776,133       | 551                |
| Tobacco Manufactures              | \$5,457               | \$886            | \$669              | 0                  |
| Textile Mill products             | \$6,784,143           | \$1,460,378      | \$1,381,828        | 38                 |
| Apparel & Other Textile Products  | \$19,597,427          | \$9,356,781      | \$5,224,535        | 156                |
| Lumber & Wood Products            | \$12,522,317          | \$4,538,133      | \$3,039,071        | 92                 |
| Furniture & Fixtures              | \$98,914              | \$30,356         | \$27,066           | 1                  |
| Paper & Allied Products           | \$18,547,558          | \$6,358,725      | \$3,704,400        | 68                 |
| Printing & Publishing             | \$25,267,217          | \$13,623,481     | \$8,193,902        | 164                |
| Chemicals & Allied Products       | \$41,869,943          | \$8,535,559      | \$6,557,048        | 53                 |
| Petroleum Refining                | \$75,591,265          | \$11,936,011     | \$2,411,707        | 17                 |
| Rubber & Plastic Products         | \$16,112,544          | \$3,582,787      | \$2,809,538        | 38                 |
| Leather & Leather Products        | \$61,648              | \$26,335         | \$16,670           | 0                  |
| Stone, Clay & Glass Products      | \$14,216,412          | \$6,296,102      | \$3,814,153        | 74                 |
| Primary Metals                    | \$73,381,243          | \$19,151,461     | \$16,581,910       | 264                |
| Fabricated Metal Products         | \$33,102,147          | \$13,326,579     | \$8,943,516        | 199                |
| Machinery, Except Electrical      | \$69,905,877          | \$22,363,620     | \$20,183,449       | 299                |
| Electrical Machinery              | \$52,339,027          | \$25,526,980     | \$18,288,188       | 240                |
| Motor Vehicles                    | \$63,602,231          | \$18,576,171     | \$11,314,592       | 101                |
| Other Transportation Equipment    | \$53,967,024          | \$25,236,852     | \$17,285,196       | 324                |
| Instruments                       | \$409,081             | \$117,506        | \$136,986          | 2                  |
| Miscellaneous Manufacturing       | \$315,519             | \$80,418         | \$75,006           | 1                  |
| Transportation & Warehousing      | \$178,101,583         | \$91,710,186     | \$65,787,243       | 1,253              |
| Communication                     | \$42,506,431          | \$27,028,489     | \$12,709,544       | 173                |
| Electric Utilities                | \$113,887,941         | \$21,841,748     | \$10,494,988       | 48                 |
| Gas Utilities                     | \$24,366,225          | \$3,120,831      | \$1,534,516        | 7                  |
| Trade                             | \$921,440,377         | \$648,494,745    | \$396,722,862      | 13,087             |
| Finance, Insurance, & Real Estate | \$405,324,958         | \$149,183,796    | \$55,830,919       | 740                |
| Other Services                    | \$715,323,654         | \$429,820,691    | \$371,358,238      | 8,479              |
| Government Enterprises            | \$14,880,675          | \$9,076,907      | \$7,250,823        | 159                |
| Total                             | \$4,127,654,207       | \$1,930,118,697  | \$1,339,371,322    | 32,703             |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

#### Table P.2

#### The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for Other Conceptual TTC-35 Construction Projects on Business Activity in the TTC-35 Study Area\*—Detailed Sectoral Results

|                                   |                 |                 |                | Employment |
|-----------------------------------|-----------------|-----------------|----------------|------------|
|                                   | Total           | Gross           | Personal       | (Person-   |
| Sector                            | Expenditures    | Product         | Income         | Years)     |
| Agriculture, Forestry & Fisheries | (\$6,273,151)   | (\$1,971,486)   | (\$1,046,357)  | -78        |
| Metal Mining                      | (\$6,751,007)   | (\$2,775,547)   | (\$2,377,468)  | -44        |
| Coal Mining                       | (\$14,355,691)  | (\$2,655,450)   | (\$3,900,177)  | -65        |
| Crude Petroleum & Natural Gas     | (\$6,397,614)   | (\$1,548,675)   | (\$635,575)    | -3         |
| Nonmetallic Mineral Mining        | (\$6,199,285)   | (\$2,141,662)   | (\$1,613,681)  | -42        |
| Construction                      | (\$28,684,747)  | (\$12,086,171)  | (\$9,771,050)  | -208       |
| Food & Kindred Products           | (\$13,532,226)  | (\$2,890,800)   | (\$1,505,713)  | -40        |
| Tobacco Manufactures              | (\$395)         | (\$64)          | (\$48)         | 0          |
| Textile Mill products             | (\$491,669)     | (\$105,838)     | (\$100,146)    | -3         |
| Apparel & Other Textile Products  | (\$1,420,289)   | (\$678,116)     | (\$378,639)    | -11        |
| Lumber & Wood Products            | (\$907,533)     | (\$328,893)     | (\$220,251)    | -7         |
| Furniture & Fixtures              | (\$7,169)       | (\$2,200)       | (\$1,962)      | 0          |
| Paper & Allied Products           | (\$1,344,201)   | (\$460,837)     | (\$268,470)    | -5         |
| Printing & Publishing             | (\$1,831,197)   | (\$987,338)     | (\$593,838)    | -12        |
| Chemicals & Allied Products       | (\$3,034,450)   | (\$618,599)     | (\$475,210)    | -4         |
| Petroleum Refining                | (\$5,478,343)   | (\$865,041)     | (\$174,784)    | -1         |
| Rubber & Plastic Products         | (\$1,167,728)   | (\$259,656)     | (\$203,616)    | -3         |
| Leather & Leather Products        | (\$4,468)       | (\$1,909)       | (\$1,208)      | 0          |
| Stone, Clay & Glass Products      | (\$1,030,309)   | (\$456,299)     | (\$276,424)    | -5         |
| Primary Metals                    | (\$5,318,175)   | (\$1,387,968)   | (\$1,201,744)  | -19        |
| Fabricated Metal Products         | (\$2,399,019)   | (\$965,820)     | (\$648,165)    | -14        |
| Machinery, Except Electrical      | (\$5,066,304)   | (\$1,620,764)   | (\$1,462,760)  | -22        |
| Electrical Machinery              | (\$3,793,178)   | (\$1,850,022)   | (\$1,325,404)  | -17        |
| Motor Vehicles                    | (\$4,609,459)   | (\$1,346,275)   | (\$820,005)    | -7         |
| Other Transportation Equipment    | (\$3,911,164)   | (\$1,828,996)   | (\$1,252,714)  | -23        |
| Instruments                       | (\$29,647)      | (\$8,516)       | (\$9,928)      | 0          |
| Miscellaneous Manufacturing       | (\$22,867)      | (\$5,828)       | (\$5,436)      | 0          |
| Transportation & Warehousing      | (\$12,907,596)  | (\$6,646,533)   | (\$4,767,814)  | -91        |
| Communication                     | (\$3,080,578)   | (\$1,958,842)   | (\$921,102)    | -13        |
| Electric Utilities                | (\$8,253,826)   | (\$1,582,942)   | (\$760,606)    | -3         |
| Gas Utilities                     | (\$1,765,899)   | (\$226,177)     | (\$111,211)    | -1         |
| Trade                             | (\$66,779,753)  | (\$46,998,504)  | (\$28,751,784) | -948       |
| Finance, Insurance, & Real Estate | (\$29,375,206)  | (\$10,811,830)  | (\$4,046,247)  | -54        |
| Other Services                    | (\$51,841,810)  | (\$31,150,491)  | (\$26,913,528) | -615       |
| Government Enterprises            | (\$1,078,450)   | (\$657,833)     | (\$525,491)    | -12        |
| Total                             | (\$299,144,402) | (\$139,881,922) | (\$97,068,556) | -2,370     |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

#### Table P.3 The Total Gross Potential Impact of Efficiency Gains from Construction of All Aspects of TTC-35 Outlined in the Conceptual Plan on Business Activity in the TTC-35 Study Area\* Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$185,033,412         | \$58,151,119     | \$30,863,441       | 2,307                            |
| Metal Mining                      | \$107,316,909         | \$44,121,293     | \$37,793,247       | 705                              |
| Coal Mining                       | \$228,204,244         | \$42,212,169     | \$61,998,897       | 1,040                            |
| Crude Petroleum & Natural Gas     | \$186,843,197         | \$45,229,261     | \$18,562,046       | 75                               |
| Nonmetallic Mineral Mining        | \$98,546,497          | \$34,044,781     | \$25,651,767       | 660                              |
| Construction                      | \$870,164,206         | \$366,639,226    | \$296,409,042      | 6,318                            |
| Food & Kindred Products           | \$399,919,769         | \$85,432,231     | \$44,498,557       | 1,179                            |
| Tobacco Manufactures              | \$11,856              | \$1,926          | \$1,453            | 0                                |
| Textile Mill products             | \$14,531,242          | \$3,128,045      | \$2,959,796        | 81                               |
| Apparel & Other Textile Products  | \$42,727,808          | \$20,400,369     | \$11,390,929       | 340                              |
| Lumber & Wood Products            | \$27,146,376          | \$9,837,944      | \$6,588,218        | 199                              |
| Furniture & Fixtures              | \$214,468             | \$65,819         | \$58,685           | 2                                |
| Paper & Allied Products           | \$39,973,811          | \$13,704,362     | \$7,983,746        | 146                              |
| Printing & Publishing             | \$54,704,979          | \$29,495,621     | \$17,740,270       | 355                              |
| Chemicals & Allied Products       | \$89,814,411          | \$18,309,464     | \$14,065,398       | 113                              |
| Petroleum Refining                | \$161,238,238         | \$25,459,839     | \$5,144,237        | 35                               |
| Rubber & Plastic Products         | \$34,742,873          | \$7,725,430      | \$6,058,102        | 83                               |
| Leather & Leather Products        | \$135,602             | \$57,926         | \$36,667           | 1                                |
| Stone, Clay & Glass Products      | \$31,120,056          | \$13,782,314     | \$8,349,270        | 161                              |
| Primary Metals                    | \$156,804,912         | \$40,923,852     | \$35,433,100       | 565                              |
| Fabricated Metal Products         | \$71,547,284          | \$28,804,190     | \$19,330,597       | 430                              |
| Machinery, Except Electrical      | \$151,899,834         | \$48,594,343     | \$43,857,006       | 650                              |
| Electrical Machinery              | \$112,526,346         | \$54,881,757     | \$39,318,710       | 515                              |
| Motor Vehicles                    | \$138,074,238         | \$40,327,055     | \$24,562,876       | 219                              |
| Other Transportation Equipment    | \$116,871,856         | \$54,653,334     | \$37,433,098       | 702                              |
| Instruments                       | \$879,903             | \$252,747        | \$294,645          | 5                                |
| Miscellaneous Manufacturing       | \$685,532             | \$174,726        | \$162,966          | 2                                |
| Transportation & Warehousing      | \$396,595,904         | \$204,219,882    | \$146,494,775      | 2,789                            |
| Communication                     | \$90,602,914          | \$57,611,515     | \$27,090,529       | 368                              |
| Electric Utilities                | \$167,360,822         | \$32,096,927     | \$15,422,615       | 70                               |
| Gas Utilities                     | \$51,953,033          | \$6,654,155      | \$3,271,854        | 15                               |
| Trade                             | \$1,987,999,697       | \$1,399,121,840  | \$855,926,167      | 28,236                           |
| Finance, Insurance, & Real Estate | \$879,488,369         | \$323,704,254    | \$121,143,895      | 1,605                            |
| Other Services                    | \$1,543,071,995       | \$927,194,658    | \$801,081,433      | 18,291                           |
| Government Enterprises            | \$32,176,541          | \$19,627,032     | \$15,678,483       | 344                              |
| Total                             | \$8,470,929,132       | \$4,056,641,406  | \$2,782,656,519    | 68,607                           |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

# Table P.4The Total Offsetting Potential Impact of Foregone Efficiency Gains fromAlternative Highway Construction Projects Stemming from Use of TxDOT Fundsfor All TTC-35 Construction Projects Outlined in the Conceptual Plan on BusinessActivity in the TTC-35 Study Area\*—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$13,409,968)        | (\$4,214,399)    | (\$2,236,773)      | -167                             |
| Metal Mining                      | (\$7,777,602)         | (\$3,197,612)    | (\$2,738,998)      | -51                              |
| Coal Mining                       | (\$16,538,697)        | (\$3,059,252)    | (\$4,493,260)      | -75                              |
| Crude Petroleum & Natural Gas     | (\$13,541,129)        | (\$3,277,910)    | (\$1,345,251)      | -5                               |
| Nonmetallic Mineral Mining        | (\$7,141,982)         | (\$2,467,335)    | (\$1,859,066)      | -48                              |
| Construction                      | (\$63,063,604)        | (\$26,571,526)   | (\$21,481,718)     | -458                             |
| Food & Kindred Products           | (\$28,983,474)        | (\$6,191,549)    | (\$3,224,954)      | -85                              |
| Tobacco Manufactures              | (\$859)               | (\$140)          | (\$105)            | 0                                |
| Textile Mill products             | (\$1,053,126)         | (\$226,700)      | (\$214,506)        | -6                               |
| Apparel & Other Textile Products  | (\$3,096,622)         | (\$1,478,480)    | (\$825,537)        | -25                              |
| Lumber & Wood Products            | (\$1,967,385)         | (\$712,988)      | (\$477,469)        | -14                              |
| Furniture & Fixtures              | (\$15,543)            | (\$4,770)        | (\$4,253)          | 0                                |
| Paper & Allied Products           | (\$2,897,031)         | (\$993,199)      | (\$578,608)        | -11                              |
| Printing & Publishing             | (\$3,964,646)         | (\$2,137,643)    | (\$1,285,695)      | -26                              |
| Chemicals & Allied Products       | (\$6,509,140)         | (\$1,326,946)    | (\$1,019,365)      | -8                               |
| Petroleum Refining                | (\$11,685,455)        | (\$1,845,157)    | (\$372,819)        | -3                               |
| Rubber & Plastic Products         | (\$2,517,928)         | (\$559,887)      | (\$439,050)        | -6                               |
| Leather & Leather Products        | (\$9,828)             | (\$4,198)        | (\$2,657)          | 0                                |
| Stone, Clay & Glass Products      | (\$2,255,371)         | (\$998,849)      | (\$605,099)        | -12                              |
| Primary Metals                    | (\$11,364,157)        | (\$2,965,883)    | (\$2,567,951)      | -41                              |
| Fabricated Metal Products         | (\$5,185,262)         | (\$2,087,532)    | (\$1,400,951)      | -31                              |
| Machinery, Except Electrical      | (\$11,008,670)        | (\$3,521,789)    | (\$3,178,459)      | -47                              |
| Electrical Machinery              | (\$8,155,147)         | (\$3,977,458)    | (\$2,849,554)      | -37                              |
| Motor Vehicles                    | (\$10,006,685)        | (\$2,922,632)    | (\$1,780,151)      | -16                              |
| Other Transportation Equipment    | (\$8,470,080)         | (\$3,960,903)    | (\$2,712,897)      | -51                              |
| Instruments                       | (\$63,769)            | (\$18,317)       | (\$21,354)         | 0                                |
| Miscellaneous Manufacturing       | (\$49,683)            | (\$12,663)       | (\$11,811)         | 0                                |
| Transportation & Warehousing      | (\$28,742,583)        | (\$14,800,473)   | (\$10,616,948)     | -202                             |
| Communication                     | (\$6,566,285)         | (\$4,175,292)    | (\$1,963,338)      | -27                              |
| Electric Utilities                | (\$12,129,178)        | (\$2,326,168)    | (\$1,117,727)      | -5                               |
| Gas Utilities                     | (\$3,765,204)         | (\$482,248)      | (\$237,122)        | -1                               |
| Trade                             | (\$144,076,744)       | (\$101,398,868)  | (\$62,031,728)     | -2,046                           |
| Finance, Insurance, & Real Estate | (\$63,739,356)        | (\$23,459,890)   | (\$8,779,688)      | -116                             |
| Other Services                    | (\$111,831,400)       | (\$67,196,785)   | (\$58,056,953)     | -1,326                           |
| Government Enterprises            | (\$2,331,938)         | (\$1,422,434)    | (\$1,136,270)      | -25                              |
| Total                             | (\$613,915,532)       | (\$293,997,875)  | (\$201,668,085)    | -4,972                           |

\*The TTC-35 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

# Table P.5The Gross Potential Impact of Efficiency Gains from Construction of OtherConceptual Aspects of TTC-69 on Business Activity in the TTC-69 Study Area\*Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$81,514,788          | \$25,617,947     | \$13,596,609       | 1,016                            |
| Metal Mining                      | \$127,300,936         | \$52,337,344     | \$44,830,920       | 836                              |
| Coal Mining                       | \$175,850,034         | \$32,527,928     | \$47,775,221       | 802                              |
| Crude Petroleum & Natural Gas     | \$152,684,534         | \$36,960,450     | \$15,168,534       | 61                               |
| Nonmetallic Mineral Mining        | \$96,458,999          | \$33,323,615     | \$25,108,389       | 646                              |
| Construction                      | \$286,392,921         | \$120,670,189    | \$97,555,669       | 2,079                            |
| Food & Kindred Products           | \$84,623,642          | \$18,077,592     | \$9,415,963        | 250                              |
| Tobacco Manufactures              | \$4,367               | \$709            | \$535              | 0                                |
| Textile Mill products             | \$960,635             | \$206,790        | \$195,667          | 5                                |
| Apparel & Other Textile Products  | \$6,377,874           | \$3,045,112      | \$1,700,296        | 51                               |
| Lumber & Wood Products            | \$9,688,298           | \$3,511,074      | \$2,351,276        | 71                               |
| Furniture & Fixtures              | \$37,947              | \$11,646         | \$10,384           | 0                                |
| Paper & Allied Products           | \$8,268,374           | \$2,834,676      | \$1,651,396        | 30                               |
| Printing & Publishing             | \$9,867,295           | \$5,320,210      | \$3,199,864        | 64                               |
| Chemicals & Allied Products       | \$54,013,580          | \$11,011,147     | \$8,458,804        | 68                               |
| Petroleum Refining                | \$132,528,745         | \$20,926,553     | \$4,228,273        | 29                               |
| Rubber & Plastic Products         | \$14,646,282          | \$3,256,749      | \$2,553,867        | 35                               |
| Leather & Leather Products        | \$5,058               | \$2,161          | \$1,368            | 0                                |
| Stone, Clay & Glass Products      | \$6,772,823           | \$2,999,518      | \$1,817,096        | 35                               |
| Primary Metals                    | \$35,067,049          | \$9,152,001      | \$7,924,077        | 126                              |
| Fabricated Metal Products         | \$32,022,548          | \$12,891,944     | \$8,651,831        | 192                              |
| Machinery, Except Electrical      | \$52,576,503          | \$16,819,772     | \$15,180,056       | 225                              |
| Electrical Machinery              | \$21,147,460          | \$10,314,116     | \$7,389,299        | 97                               |
| Motor Vehicles                    | \$18,879,916          | \$5,514,218      | \$3,358,664        | 30                               |
| Other Transportation Equipment    | \$15,620,209          | \$7,304,552      | \$5,003,025        | 94                               |
| Instruments                       | \$179,227             | \$51,482         | \$60,016           | 1                                |
| Miscellaneous Manufacturing       | \$216,190             | \$55,102         | \$51,393           | 1                                |
| Transportation & Warehousing      | \$134,732,116         | \$69,377,864     | \$49,767,410       | 948                              |
| Communication                     | \$17,083,285          | \$10,862,718     | \$5,107,951        | 69                               |
| Electric Utilities                | \$227,817,769         | \$43,691,529     | \$20,993,836       | 95                               |
| Gas Utilities                     | \$30,318,909          | \$3,883,252      | \$1,909,399        | 9                                |
| Trade                             | \$581,965,579         | \$409,577,905    | \$250,563,201      | 8,266                            |
| Finance, Insurance, & Real Estate | \$243,433,545         | \$89,598,086     | \$33,531,413       | 444                              |
| Other Services                    | \$508,214,245         | \$305,373,654    | \$263,837,978      | 6,024                            |
| Government Enterprises            | \$9,637,798           | \$5,878,860      | \$4,696,156        | 103                              |
| Total                             | \$3,176,909,480       | \$1,372,988,463  | \$957,645,835      | 22,804                           |

\*The TTC-69 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

# Table P.6The Offsetting Potential Impact of Foregone Efficiency Gains from AlternativeHighway Construction Projects Stemming from Use of TxDOT Funds for OtherConceptual TTC-69 Construction Projects on Business Activityin the TTC-69 Study Area\*

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$5,907,639)         | (\$1,856,615)    | (\$985,390)        | -74                              |
| Metal Mining                      | (\$9,225,909)         | (\$3,793,056)    | (\$3,249,041)      | -61                              |
| Coal Mining                       | (\$12,744,419)        | (\$2,357,404)    | (\$3,462,424)      | -58                              |
| Crude Petroleum & Natural Gas     | (\$11,065,540)        | (\$2,678,643)    | (\$1,099,313)      | -4                               |
| Nonmetallic Mineral Mining        | (\$6,990,694)         | (\$2,415,070)    | (\$1,819,686)      | -47                              |
| Construction                      | (\$20,755,818)        | (\$8,745,357)    | (\$7,070,174)      | -151                             |
| Food & Kindred Products           | (\$6,132,948)         | (\$1,310,141)    | (\$682,405)        | -18                              |
| Tobacco Manufactures              | (\$316)               | (\$51)           | (\$39)             | 0                                |
| Textile Mill products             | (\$69,620)            | (\$14,987)       | (\$14,181)         | 0                                |
| Apparel & Other Textile Products  | (\$462,225)           | (\$220,689)      | (\$123,226)        | -4                               |
| Lumber & Wood Products            | (\$702,142)           | (\$254,459)      | (\$170,405)        | -5                               |
| Furniture & Fixtures              | (\$2,750)             | (\$844)          | (\$753)            | 0                                |
| Paper & Allied Products           | (\$599,236)           | (\$205,438)      | (\$119,682)        | -2                               |
| Printing & Publishing             | (\$715,115)           | (\$385,573)      | (\$231,904)        | -5                               |
| Chemicals & Allied Products       | (\$3,914,538)         | (\$798,013)      | (\$613,037)        | -5                               |
| Petroleum Refining                | (\$9,604,785)         | (\$1,516,615)    | (\$306,437)        | -2                               |
| Rubber & Plastic Products         | (\$1,061,463)         | (\$236,027)      | (\$185,087)        | -3                               |
| Leather & Leather Products        | (\$367)               | (\$157)          | (\$99)             | 0                                |
| Stone, Clay & Glass Products      | (\$490,848)           | (\$217,385)      | (\$131,691)        | -3                               |
| Primary Metals                    | (\$2,541,422)         | (\$663,275)      | (\$574,283)        | -9                               |
| Fabricated Metal Products         | (\$2,320,777)         | (\$934,321)      | (\$627,026)        | -14                              |
| Machinery, Except Electrical      | (\$3,810,389)         | (\$1,218,983)    | (\$1,100,148)      | -16                              |
| Electrical Machinery              | (\$1,532,625)         | (\$747,497)      | (\$535,526)        | -7                               |
| Motor Vehicles                    | (\$1,368,288)         | (\$399,633)      | (\$243,413)        | -2                               |
| Other Transportation Equipment    | (\$1,132,047)         | (\$529,384)      | (\$362,585)        | -7                               |
| Instruments                       | (\$12,989)            | (\$3,731)        | (\$4,350)          | 0                                |
| Miscellaneous Manufacturing       | (\$15,668)            | (\$3,993)        | (\$3,725)          | 0                                |
| Transportation & Warehousing      | (\$9,764,471)         | (\$5,028,037)    | (\$3,606,805)      | -69                              |
| Communication                     | (\$1,238,081)         | (\$787,256)      | (\$370,190)        | -5                               |
| Electric Utilities                | (\$16,510,688)        | (\$3,166,466)    | (\$1,521,491)      | -7                               |
| Gas Utilities                     | (\$2,197,309)         | (\$281,432)      | (\$138,380)        | -1                               |
| Trade                             | (\$42,176,921)        | (\$29,683,431)   | (\$18,159,123)     | -599                             |
| Finance, Insurance, & Real Estate | (\$17,642,414)        | (\$6,493,462)    | (\$2,430,130)      | -32                              |
| Other Services                    | (\$36,831,924)        | (\$22,131,413)   | (\$19,121,189)     | -437                             |
| Government Enterprises            | (\$698,482)           | (\$426,060)      | (\$340,346)        | -7                               |
| Total                             | (\$230,240,868)       | (\$99,504,898)   | (\$69,403,680)     | -1,653                           |

\*The TTC-69 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

#### Table P.7 The Total Potential Impact of Efficiency Gains from Construction of All Aspects of TTC-69 Outlined in the Conceptual Plan on Business Activity in the TTC-69 Study Area\* Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$272,255,636         | \$85,562,762     | \$45,412,046       | 3,395                            |
| Metal Mining                      | \$127,300,936         | \$52,337,344     | \$44,830,920       | 836                              |
| Coal Mining                       | \$175,850,034         | \$32,527,928     | \$47,775,221       | 802                              |
| Crude Petroleum & Natural Gas     | \$495,246,053         | \$119,884,553    | \$49,200,507       | 198                              |
| Nonmetallic Mineral Mining        | \$96,458,999          | \$33,323,615     | \$25,108,389       | 646                              |
| Construction                      | \$1,042,942,220       | \$439,438,356    | \$355,263,412      | 7,572                            |
| Food & Kindred Products           | \$284,277,753         | \$60,728,388     | \$31,631,219       | 838                              |
| Tobacco Manufactures              | \$15,326              | \$2,489          | \$1,878            | 0                                |
| Textile Mill products             | \$3,227,669           | \$694,799        | \$657,428          | 18                               |
| Apparel & Other Textile Products  | \$22,624,226          | \$10,801,925     | \$6,031,458        | 180                              |
| Lumber & Wood Products            | \$33,762,989          | \$12,235,829     | \$8,194,020        | 248                              |
| Furniture & Fixtures              | \$132,316             | \$40,607         | \$36,206           | 1                                |
| Paper & Allied Products           | \$28,303,844          | \$9,703,506      | \$5,652,969        | 104                              |
| Printing & Publishing             | \$34,251,210          | \$18,467,436     | \$11,107,320       | 222                              |
| Chemicals & Allied Products       | \$182,281,913         | \$37,159,784     | \$28,546,283       | 230                              |
| Petroleum Refining                | \$439,779,015         | \$69,441,982     | \$14,030,962       | 96                               |
| Rubber & Plastic Products         | \$50,211,132          | \$11,164,953     | \$8,755,296        | 120                              |
| Leather & Leather Products        | \$18,449              | \$7,881          | \$4,989            | 0                                |
| Stone, Clay & Glass Products      | \$24,328,830          | \$10,774,646     | \$6,527,237        | 126                              |
| Primary Metals                    | \$116,987,701         | \$30,532,126     | \$26,435,632       | 421                              |
| Fabricated Metal Products         | \$110,582,942         | \$44,519,538     | \$29,877,226       | 664                              |
| Machinery, Except Electrical      | \$184,554,634         | \$59,040,954     | \$53,285,205       | 790                              |
| Electrical Machinery              | \$71,857,011          | \$35,046,362     | \$25,108,120       | 329                              |
| Motor Vehicles                    | \$66,082,350          | \$19,300,534     | \$11,755,796       | 105                              |
| Other Transportation Equipment    | \$54,263,631          | \$25,375,556     | \$17,380,197       | 326                              |
| Instruments                       | \$609,828             | \$175,170        | \$204,208          | 4                                |
| Miscellaneous Manufacturing       | \$758,646             | \$193,361        | \$180,347          | 3                                |
| Transportation & Warehousing      | \$511,357,002         | \$263,314,032    | \$188,885,281      | 3,596                            |
| Communication                     | \$56,569,029          | \$35,970,449     | \$16,914,301       | 230                              |
| Electric Utilities                | \$331,630,295         | \$63,600,986     | \$30,560,356       | 139                              |
| Gas Utilities                     | \$100,489,784         | \$12,870,752     | \$6,328,561        | 29                               |
| Trade                             | \$1,998,589,214       | \$1,406,574,569  | \$860,485,445      | 28,386                           |
| Finance, Insurance, & Real Estate | \$850,758,305         | \$313,129,875    | \$117,186,512      | 1,552                            |
| Other Services                    | \$1,744,510,523       | \$1,048,234,200  | \$905,657,672      | 20,678                           |
| Government Enterprises            | \$33,324,242          | \$20,327,107     | \$16,237,717       | 356                              |
| Total                             | \$9,546,193,689       | \$4,382,504,352  | \$2,995,250,331    | 73,240                           |

\*The TTC-69 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

# Table P.8The Total Offsetting Potential Impact of Foregone Efficiency Gains fromAlternative Highway Construction Projects Stemming from Use of TxDOT Fundsfor All TTC-69 Construction Projects Outlined in the Conceptual Plan on BusinessActivity in the TTC-69 Study Area\*—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | (\$19,731,243)        | (\$6,201,009)    | (\$3,291,157)      | -246                             |
| Metal Mining                      | (\$9,225,909)         | (\$3,793,056)    | (\$3,249,041)      | -61                              |
| Coal Mining                       | (\$12,744,419)        | (\$2,357,404)    | (\$3,462,424)      | -58                              |
| Crude Petroleum & Natural Gas     | (\$35,892,077)        | (\$8,688,420)    | (\$3,565,719)      | -14                              |
| Nonmetallic Mineral Mining        | (\$6,990,694)         | (\$2,415,070)    | (\$1,819,686)      | -47                              |
| Construction                      | (\$75,585,384)        | (\$31,847,514)   | (\$25,747,084)     | -549                             |
| Food & Kindred Products           | (\$20,602,525)        | (\$4,401,182)    | (\$2,292,416)      | -61                              |
| Tobacco Manufactures              | (\$1,111)             | (\$180)          | (\$136)            | 0                                |
| Textile Mill products             | (\$233,920)           | (\$50,354)       | (\$47,646)         | -1                               |
| Apparel & Other Textile Products  | (\$1,639,651)         | (\$782,850)      | (\$437,119)        | -13                              |
| Lumber & Wood Products            | (\$2,446,913)         | (\$886,770)      | (\$593,847)        | -18                              |
| Furniture & Fixtures              | (\$9,589)             | (\$2,943)        | (\$2,624)          | 0                                |
| Paper & Allied Products           | (\$2,051,271)         | (\$703,244)      | (\$409,689)        | -8                               |
| Printing & Publishing             | (\$2,482,296)         | (\$1,338,395)    | (\$804,983)        | -16                              |
| Chemicals & Allied Products       | (\$13,210,558)        | (\$2,693,089)    | (\$2,068,841)      | -17                              |
| Petroleum Refining                | (\$31,872,202)        | (\$5,032,684)    | (\$1,016,869)      | -7                               |
| Rubber & Plastic Products         | (\$3,638,963)         | (\$809,160)      | (\$634,525)        | -9                               |
| Leather & Leather Products        | (\$1,337)             | (\$571)          | (\$362)            | 0                                |
| Stone, Clay & Glass Products      | (\$1,763,189)         | (\$780,873)      | (\$473,050)        | -9                               |
| Primary Metals                    | (\$8,478,476)         | (\$2,212,762)    | (\$1,915,875)      | -31                              |
| Fabricated Metal Products         | (\$8,014,302)         | (\$3,226,474)    | (\$2,165,299)      | -48                              |
| Machinery, Except Electrical      | (\$13,375,269)        | (\$4,278,888)    | (\$3,861,750)      | -57                              |
| Electrical Machinery              | (\$5,207,709)         | (\$2,539,923)    | (\$1,819,666)      | -24                              |
| Motor Vehicles                    | (\$4,789,201)         | (\$1,398,772)    | (\$851,980)        | -8                               |
| Other Transportation Equipment    | (\$3,932,660)         | (\$1,839,048)    | (\$1,259,599)      | -24                              |
| Instruments                       | (\$44,196)            | (\$12,695)       | (\$14,800)         | 0                                |
| Miscellaneous Manufacturing       | (\$54,982)            | (\$14,013)       | (\$13,070)         | 0                                |
| Transportation & Warehousing      | (\$37,059,690)        | (\$19,083,216)   | (\$13,689,125)     | -261                             |
| Communication                     | (\$4,099,740)         | (\$2,606,894)    | (\$1,225,834)      | -17                              |
| Electric Utilities                | (\$24,034,316)        | (\$4,609,368)    | (\$2,214,807)      | -10                              |
| Gas Utilities                     | (\$7,282,818)         | (\$932,785)      | (\$458,651)        | -2                               |
| Trade                             | (\$144,844,201)       | (\$101,938,992)  | (\$62,362,153)     | -2,057                           |
| Finance, Insurance, & Real Estate | (\$61,657,196)        | (\$22,693,531)   | (\$8,492,884)      | -112                             |
| Other Services                    | (\$126,430,299)       | (\$75,968,910)   | (\$65,635,930)     | -1,499                           |
| Government Enterprises            | (\$2,415,115)         | (\$1,473,171)    | (\$1,176,800)      | -26                              |
| Total                             | (\$691,843,419)       | (\$317,614,213)  | (\$217,075,444)    | -5,308                           |

\*The TTC-69 Study Area is defined in the accompanying report.

Note: All monetary values are in constant 2005 dollars.

### **APPENDIX Q**

Potential Impact of Efficiency Gains from Other TTC-35 Construction, the Other TTC-35 Conceptual Plan, Other TTC-69 Construction, and the Total TTC-69 Conceptual Plan, Other Priority Corridors, Non-Priority Corridors, and the Entire TTC Conceptual Plan on Texas



# Table Q.1The Gross Potential Impact of Efficiency Gains from Construction of Other<br/>Conceptual Aspects of TTC-35 on Business Activity in Texas<br/>Detailed Sectoral Results

|                                     | Total                 | 0                | Dereenel           | Employment         |
|-------------------------------------|-----------------------|------------------|--------------------|--------------------|
| Sector                              | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | (Person-<br>Years) |
|                                     | •                     |                  |                    | ,                  |
| Agriculture, Forestry and Fisheries | \$167,912,241         | \$52,770,386     | \$28,007,642       | 2,094              |
| Metal Mining                        | \$93,151,740          | \$38,297,555     | \$32,804,772       | 612                |
| Coal Mining                         | \$198,082,695         | \$36,640,424     | \$53,815,426       | 903                |
| Crude Petroleum and Natural Gas     | \$180,502,604         | \$43,694,389     | \$17,932,136       | 72                 |
| Nonmetallic Mineral Mining          | \$85,538,968          | \$29,551,081     | \$22,265,893       | 573                |
| Construction                        | \$395,797,863         | \$166,767,400    | \$134,822,904      | 2,874              |
| Food and Kindred Products           | \$186,720,356         | \$39,887,842     | \$20,776,133       | 551                |
| Tobacco Manufactures                | \$5,457               | \$886            | \$669              | 0                  |
| Textile Mill products               | \$6,784,143           | \$1,460,378      | \$1,381,828        | 38                 |
| Apparel and Other Textile Products  | \$19,597,427          | \$9,356,781      | \$5,224,535        | 156                |
| Lumber and Wood Products            | \$13,102,109          | \$4,748,252      | \$3,179,782        | 96                 |
| Furniture and Fixtures              | \$98,914              | \$30,356         | \$27,066           | 1                  |
| Paper and Allied Products           | \$18,547,558          | \$6,358,725      | \$3,704,400        | 68                 |
| Printing and Publishing             | \$25,267,217          | \$13,623,481     | \$8,193,902        | 164                |
| Chemicals and Allied Products       | \$65,648,055          | \$13,382,938     | \$10,280,822       | 83                 |
| Petroleum Refining                  | \$159,183,669         | \$25,135,418     | \$5,078,687        | 35                 |
| Rubber and Plastic Products         | \$19,793,889          | \$4,401,372      | \$3,451,453        | 47                 |
| Leather and Leather Products        | \$61,648              | \$26,335         | \$16,670           | 0                  |
| Stone, Clay and Glass Products      | \$14,216,412          | \$6,296,102      | \$3,814,153        | 74                 |
| Primary Metals                      | \$73,381,243          | \$19,151,461     | \$16,581,910       | 264                |
| Fabricated Metal Products           | \$39,556,963          | \$15,925,220     | \$10,687,474       | 238                |
| Machinery, Except Electrical        | \$72,640,249          | \$23,238,374     | \$20,972,925       | 311                |
| Electrical Machinery                | \$52,339,027          | \$25,526,980     | \$18,288,188       | 240                |
| Motor Vehicles                      | \$63,602,231          | \$18,576,171     | \$11,314,592       | 101                |
| Other Transportation Equipment      | \$53,967,024          | \$25,236,852     | \$17,285,196       | 324                |
| Instruments                         | \$409,081             | \$117,506        | \$136,986          | 2                  |
| Miscellaneous Manufacturing         | \$315,519             | \$80,418         | \$75,006           | 1                  |
| Transportation and Warehousing      | \$178,101,583         | \$91,710,186     | \$65,787,243       | 1,253              |
| Communication                       | \$42,506,431          | \$27,028,489     | \$12,709,544       | 173                |
| Electric Utilities                  | \$166,197,348         | \$31,873,792     | \$15,315,398       | 69                 |
| Gas Utilities                       | \$36,386,566          | \$4,660,399      | \$2,291,522        | 10                 |
| Trade                               | \$921,440,377         | \$648,494,745    | \$396,722,862      | 13,087             |
| Finance, Insurance, and Real Estate | \$405,324,958         | \$149,183,796    | \$55,830,919       | 740                |
| Other Services                      | \$715,323,654         | \$429,820,691    | \$371,358,238      | 8,479              |
| Government Enterprises              | \$14,880,675          | \$9,076,907      | \$7,250,823        | 159                |
| Total                               | \$4,486,385,893       | \$2,012,132,089  | \$1,377,387,701    | 33,891             |

Note: All monetary values are in constant 2005 dollars.

# The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for Other Conceptual TTC-35 Construction Projects on Business Activity in Texas Detailed Sectoral Results

|                                     |                 |                 |                | Employment |
|-------------------------------------|-----------------|-----------------|----------------|------------|
|                                     | Total           | Gross           | Personal       | (Person-   |
| Sector                              | Expenditures    | Product         | Income         | Years)     |
| Agriculture, Forestry and Fisheries | (\$12,169,141)  | (\$3,824,440)   | (\$2,029,804)  | -152       |
| Metal Mining                        | (\$6,751,007)   | (\$2,775,547)   | (\$2,377,468)  | -44        |
| Coal Mining                         | (\$14,355,691)  | (\$2,655,450)   | (\$3,900,177)  | -65        |
| Crude Petroleum and Natural Gas     | (\$13,081,605)  | (\$3,166,673)   | (\$1,299,600)  | -5         |
| Nonmetallic Mineral Mining          | (\$6,199,285)   | (\$2,141,662)   | (\$1,613,681)  | -42        |
| Construction                        | (\$28,684,747)  | (\$12,086,171)  | (\$9,771,050)  | -208       |
| Food and Kindred Products           | (\$13,532,226)  | (\$2,890,800)   | (\$1,505,713)  | -40        |
| Tobacco Manufactures                | (\$395)         | (\$64)          | (\$48)         | 0          |
| Textile Mill products               | (\$491,669)     | (\$105,838)     | (\$100,146)    | -3         |
| Apparel and Other Textile Products  | (\$1,420,289)   | (\$678,116)     | (\$378,639)    | -11        |
| Lumber and Wood Products            | (\$949,552)     | (\$344,121)     | (\$230,449)    | -7         |
| Furniture and Fixtures              | (\$7,169)       | (\$2,200)       | (\$1,962)      | 0          |
| Paper and Allied Products           | (\$1,344,201)   | (\$460,837)     | (\$268,470)    | -5         |
| Printing and Publishing             | (\$1,831,197)   | (\$987,338)     | (\$593,838)    | -12        |
| Chemicals and Allied Products       | (\$4,757,726)   | (\$969,905)     | (\$745,084)    | -6         |
| Petroleum Refining                  | (\$11,536,553)  | (\$1,821,645)   | (\$368,069)    | -3         |
| Rubber and Plastic Products         | (\$1,434,527)   | (\$318,982)     | (\$250,138)    | -3         |
| Leather and Leather Products        | (\$4,468)       | (\$1,909)       | (\$1,208)      | 0          |
| Stone, Clay and Glass Products      | (\$1,030,309)   | (\$456,299)     | (\$276,424)    | -5         |
| Primary Metals                      | (\$5,318,175)   | (\$1,387,968)   | (\$1,201,744)  | -19        |
| Fabricated Metal Products           | (\$2,866,821)   | (\$1,154,152)   | (\$774,556)    | -17        |
| Machinery, Except Electrical        | (\$5,264,473)   | (\$1,684,160)   | (\$1,519,975)  | -23        |
| Electrical Machinery                | (\$3,793,178)   | (\$1,850,022)   | (\$1,325,404)  | -17        |
| Motor Vehicles                      | (\$4,609,459)   | (\$1,346,275)   | (\$820,005)    | -7         |
| Other Transportation Equipment      | (\$3,911,164)   | (\$1,828,996)   | (\$1,252,714)  | -23        |
| Instruments                         | (\$29,647)      | (\$8,516)       | (\$9,928)      | 0          |
| Miscellaneous Manufacturing         | (\$22,867)      | (\$5,828)       | (\$5,436)      | 0          |
| Transportation and Warehousing      | (\$12,907,596)  | (\$6,646,533)   | (\$4,767,814)  | -91        |
| Communication                       | (\$3,080,578)   | (\$1,958,842)   | (\$921,102)    | -13        |
| Electric Utilities                  | (\$12,044,857)  | (\$2,309,996)   | (\$1,109,956)  | -5         |
| Gas Utilities                       | (\$2,637,052)   | (\$337,754)     | (\$166,074)    | -1         |
| Trade                               | (\$66,779,753)  | (\$46,998,504)  | (\$28,751,784) | -948       |
| Finance, Insurance, and Real Estate | (\$29,375,206)  | (\$10,811,830)  | (\$4,046,247)  | -54        |
| Other Services                      | (\$51,841,810)  | (\$31,150,491)  | (\$26,913,528) | -615       |
| Government Enterprises              | (\$1,078,450)   | (\$657,833)     | (\$525,491)    | -12        |
| Total                               | (\$325,142,843) | (\$145,825,697) | (\$99,823,725) | -2,456     |

Note: All monetary values are in constant 2005 dollars.

# Table Q.3The Total Gross Potential Impact of Efficiency Gains from Construction of All<br/>Aspects of TTC-35 Outlined in the Conceptual Plan on<br/>Business Activity in Texas<br/>Detailed Sectoral Results

| Sector                              | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-------------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry and Fisheries | \$358,942,053         | \$112,806,015    | \$59,871,278       | 4,476                            |
| Metal Mining                        | \$107,316,909         | \$44,121,293     | \$37,793,247       | 705                              |
| Coal Mining                         | \$228,204,244         | \$42,212,169     | \$61,998,897       | 1,040                            |
| Crude Petroleum and Natural Gas     | \$382,050,090         | \$92,483,128     | \$37,954,989       | 152                              |
| Nonmetallic Mineral Mining          | \$98,546,497          | \$34,044,781     | \$25,651,767       | 660                              |
| Construction                        | \$870,164,206         | \$366,639,226    | \$296,409,042      | 6,318                            |
| Food and Kindred Products           | \$399,919,769         | \$85,432,231     | \$44,498,557       | 1,179                            |
| Tobacco Manufactures                | \$11,856              | \$1,926          | \$1,453            | 0                                |
| Textile Mill products               | \$14,531,242          | \$3,128,045      | \$2,959,796        | 81                               |
| Apparel and Other Textile Products  | \$42,727,808          | \$20,400,369     | \$11,390,929       | 340                              |
| Lumber and Wood Products            | \$28,403,271          | \$10,293,448     | \$6,893,257        | 208                              |
| Furniture and Fixtures              | \$214,468             | \$65,819         | \$58,685           | 2                                |
| Paper and Allied Products           | \$39,973,811          | \$13,704,362     | \$7,983,746        | 146                              |
| Printing and Publishing             | \$54,704,979          | \$29,495,621     | \$17,740,270       | 355                              |
| Chemicals and Allied Products       | \$140,820,385         | \$28,707,484     | \$22,053,195       | 178                              |
| Petroleum Refining                  | \$339,543,124         | \$53,614,535     | \$10,832,978       | 74                               |
| Rubber and Plastic Products         | \$42,680,818          | \$9,490,512      | \$7,442,238        | 102                              |
| Leather and Leather Products        | \$135,602             | \$57,926         | \$36,667           | 1                                |
| Stone, Clay and Glass Products      | \$31,120,056          | \$13,782,314     | \$8,349,270        | 161                              |
| Primary Metals                      | \$156,804,912         | \$40,923,852     | \$35,433,100       | 565                              |
| Fabricated Metal Products           | \$85,498,784          | \$34,420,918     | \$23,100,005       | 513                              |
| Machinery, Except Electrical        | \$157,841,402         | \$50,495,112     | \$45,572,475       | 676                              |
| Electrical Machinery                | \$112,526,346         | \$54,881,757     | \$39,318,710       | 515                              |
| Motor Vehicles                      | \$138,074,238         | \$40,327,055     | \$24,562,876       | 219                              |
| Other Transportation Equipment      | \$116,871,856         | \$54,653,334     | \$37,433,098       | 702                              |
| Instruments                         | \$879,903             | \$252,747        | \$294,645          | 5                                |
| Miscellaneous Manufacturing         | \$685,532             | \$174,726        | \$162,966          | 2                                |
| Transportation and Warehousing      | \$396,595,904         | \$204,219,882    | \$146,494,775      | 2,789                            |
| Communication                       | \$90,602,914          | \$57,611,515     | \$27,090,529       | 368                              |
| Electric Utilities                  | \$244,230,639         | \$46,839,235     | \$22,506,313       | 102                              |
| Gas Utilities                       | \$77,582,493          | \$9,936,781      | \$4,885,925        | 22                               |
| Trade                               | \$1,987,999,697       | \$1,399,121,840  | \$855,926,167      | 28,236                           |
| Finance, Insurance, and Real Estate | \$879,488,369         | \$323,704,254    | \$121,143,895      | 1,605                            |
| Other Services                      | \$1,543,071,995       | \$927,194,658    | \$801,081,433      | 18,291                           |
| Government Enterprises              | \$32,176,541          | \$19,627,032     | \$15,678,483       | 344                              |
| Total                               | \$9,200,942,712       | \$4,224,865,904  | \$2,860,605,657    | 71,134                           |

Note: All monetary values are in constant 2005 dollars.

# Table Q.4 The Total Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for All TTC-35 Construction Projects Outlined in the Conceptual Plan on Business Activity in Texas—Detailed Sectoral Results

| Sector                              | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-------------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry and Fisheries | (\$26,013,687)        | (\$8,175,415)    | (\$4,339,064)      | -324                             |
| Metal Mining                        | (\$7,777,602)         | (\$3,197,612)    | (\$2,738,998)      | -51                              |
| Coal Mining                         | (\$16,538,697)        | (\$3,059,252)    | (\$4,493,260)      | -75                              |
| Crude Petroleum and Natural Gas     | (\$27,688,401)        | (\$6,702,550)    | (\$2,750,720)      | -11                              |
| Nonmetallic Mineral Mining          | (\$7,141,982)         | (\$2,467,335)    | (\$1,859,066)      | -48                              |
| Construction                        | (\$63,063,604)        | (\$26,571,526)   | (\$21,481,718)     | -458                             |
| Food and Kindred Products           | (\$28,983,474)        | (\$6,191,549)    | (\$3,224,954)      | -85                              |
| Tobacco Manufactures                | (\$859)               | (\$140)          | (\$105)            | 0                                |
| Textile Mill products               | (\$1,053,126)         | (\$226,700)      | (\$214,506)        | -6                               |
| Apparel and Other Textile Products  | (\$3,096,622)         | (\$1,478,480)    | (\$825,537)        | -25                              |
| Lumber and Wood Products            | (\$2,058,477)         | (\$745,999)      | (\$499,577)        | -15                              |
| Furniture and Fixtures              | (\$15,543)            | (\$4,770)        | (\$4,253)          | 0                                |
| Paper and Allied Products           | (\$2,897,031)         | (\$993,199)      | (\$578,608)        | -11                              |
| Printing and Publishing             | (\$3,964,646)         | (\$2,137,643)    | (\$1,285,695)      | -26                              |
| Chemicals and Allied Products       | (\$10,205,707)        | (\$2,080,524)    | (\$1,598,266)      | -13                              |
| Petroleum Refining                  | (\$24,607,784)        | (\$3,885,618)    | (\$785,101)        | -5                               |
| Rubber and Plastic Products         | (\$3,093,216)         | (\$687,808)      | (\$539,363)        | -7                               |
| Leather and Leather Products        | (\$9,828)             | (\$4,198)        | (\$2,657)          | 0                                |
| Stone, Clay and Glass Products      | (\$2,255,371)         | (\$998,849)      | (\$605,099)        | -12                              |
| Primary Metals                      | (\$11,364,157)        | (\$2,965,883)    | (\$2,567,951)      | -41                              |
| Fabricated Metal Products           | (\$6,196,372)         | (\$2,494,595)    | (\$1,674,132)      | -37                              |
| Machinery, Except Electrical        | (\$11,439,275)        | (\$3,659,544)    | (\$3,302,784)      | -49                              |
| Electrical Machinery                | (\$8,155,147)         | (\$3,977,458)    | (\$2,849,554)      | -37                              |
| Motor Vehicles                      | (\$10,006,685)        | (\$2,922,632)    | (\$1,780,151)      | -16                              |
| Other Transportation Equipment      | (\$8,470,080)         | (\$3,960,903)    | (\$2,712,897)      | -51                              |
| Instruments                         | (\$63,769)            | (\$18,317)       | (\$21,354)         | 0                                |
| Miscellaneous Manufacturing         | (\$49,683)            | (\$12,663)       | (\$11,811)         | 0                                |
| Transportation and Warehousing      | (\$28,742,583)        | (\$14,800,473)   | (\$10,616,948)     | -202                             |
| Communication                       | (\$6,566,285)         | (\$4,175,292)    | (\$1,963,338)      | -27                              |
| Electric Utilities                  | (\$17,700,181)        | (\$3,394,590)    | (\$1,631,105)      | -7                               |
| Gas Utilities                       | (\$5,622,653)         | (\$720,151)      | (\$354,099)        | -2                               |
| Trade                               | (\$144,076,744)       | (\$101,398,868)  | (\$62,031,728)     | -2,046                           |
| Finance, Insurance, and Real Estate | (\$63,739,356)        | (\$23,459,890)   | (\$8,779,688)      | -116                             |
| Other Services                      | (\$111,831,400)       | (\$67,196,785)   | (\$58,056,953)     | -1,326                           |
| Government Enterprises              | (\$2,331,938)         | (\$1,422,434)    | (\$1,136,270)      | -25                              |
| Total                               | (\$666,821,968)       | (\$306,189,647)  | (\$207,317,310)    | -5,155                           |

Note: All monetary values are in constant 2005 dollars.

# Table Q.5 The Gross Potential Impact of Efficiency Gains from Construction of Other Conceptual Aspects of TTC-69 on Business Activity in Texas Detailed Sectoral Results

| Sector                              | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-------------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry and Fisheries | \$139,162,504         | \$43,735,103     | \$23,212,206       | 1,735                            |
| Metal Mining                        | \$151,676,826         | \$62,359,025     | \$53,415,253       | 997                              |
| Coal Mining                         | \$322,533,475         | \$59,660,755     | \$87,626,414       | 1,470                            |
| Crude Petroleum and Natural Gas     | \$152,684,534         | \$36,960,450     | \$15,168,534       | 61                               |
| Nonmetallic Mineral Mining          | \$139,281,126         | \$48,117,342     | \$36,255,039       | 933                              |
| Construction                        | \$308,499,812         | \$129,984,814    | \$105,086,067      | 2,240                            |
| Food and Kindred Products           | \$154,124,054         | \$32,924,508     | \$17,149,185       | 454                              |
| Tobacco Manufactures                | \$4,367               | \$709            | \$535              | 0                                |
| Textile Mill products               | \$5,599,096           | \$1,205,281      | \$1,140,452        | 31                               |
| Apparel and Other Textile Products  | \$15,564,777          | \$7,431,395      | \$4,149,459        | 124                              |
| Lumber and Wood Products            | \$10,538,208          | \$3,819,084      | \$2,557,543        | 77                               |
| Furniture and Fixtures              | \$79,527              | \$24,406         | \$21,761           | 1                                |
| Paper and Allied Products           | \$15,108,131          | \$5,179,574      | \$3,017,463        | 55                               |
| Printing and Publishing             | \$20,379,793          | \$10,988,299     | \$6,608,960        | 132                              |
| Chemicals and Allied Products       | \$54,013,580          | \$11,011,147     | \$8,458,804        | 68                               |
| Petroleum Refining                  | \$132,528,745         | \$20,926,553     | \$4,228,273        | 29                               |
| Rubber and Plastic Products         | \$16,106,384          | \$3,581,418      | \$2,808,464        | 38                               |
| Leather and Leather Products        | \$47,996              | \$20,503         | \$12,978           | 0                                |
| Stone, Clay and Glass Products      | \$11,190,169          | \$4,955,853      | \$3,002,236        | 58                               |
| Primary Metals                      | \$60,866,026          | \$15,885,167     | \$13,753,855       | 219                              |
| Fabricated Metal Products           | \$32,022,548          | \$12,891,944     | \$8,651,831        | 192                              |
| Machinery, Except Electrical        | \$58,126,242          | \$18,595,192     | \$16,782,395       | 249                              |
| Electrical Machinery                | \$42,856,475          | \$20,902,116     | \$14,974,816       | 196                              |
| Motor Vehicles                      | \$50,998,137          | \$14,894,920     | \$9,072,373        | 81                               |
| Other Transportation Equipment      | \$43,503,761          | \$20,343,868     | \$13,933,898       | 261                              |
| Instruments                         | \$334,644             | \$96,125         | \$112,059          | 2                                |
| Miscellaneous Manufacturing         | \$252,530             | \$64,364         | \$60,032           | 1                                |
| Transportation and Warehousing      | \$134,732,116         | \$69,377,864     | \$49,767,410       | 948                              |
| Communication                       | \$35,441,124          | \$22,535,885     | \$10,596,997       | 144                              |
| Electric Utilities                  | \$227,817,769         | \$43,691,529     | \$20,993,836       | 95                               |
| Gas Utilities                       | \$30,318,909          | \$3,883,252      | \$1,909,399        | 9                                |
| Trade                               | \$748,861,939         | \$527,036,848    | \$322,419,832      | 10,636                           |
| Finance, Insurance, and Real Estate | \$325,352,346         | \$119,749,097    | \$44,815,203       | 594                              |
| Other Services                      | \$581,537,946         | \$349,432,093    | \$301,903,769      | 6,893                            |
| Government Enterprises              | \$12,035,553          | \$7,341,441      | \$5,864,497        | 129                              |
| Total                               | \$4,034,181,172       | \$1,729,607,923  | \$1,209,531,827    | 29,154                           |

Note: All monetary values are in constant 2005 dollars.

# Table Q.6 The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for Other Conceptual TTC-69 Construction Projects on Business Activity in Texas Detailed Sectoral Results

| Sector                              | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-------------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry and Fisheries | (\$10,085,555)        | (\$3,169,624)    | (\$1,682,263)      | -126                             |
| Metal Mining                        | (\$10,992,508)        | (\$4,519,359)    | (\$3,871,176)      | -72                              |
| Coal Mining                         | (\$23,375,040)        | (\$4,323,807)    | (\$6,350,569)      | -107                             |
| Crude Petroleum and Natural Gas     | (\$11,065,540)        | (\$2,678,643)    | (\$1,099,313)      | -4                               |
| Nonmetallic Mineral Mining          | (\$10,094,152)        | (\$3,487,219)    | (\$2,627,519)      | -68                              |
| Construction                        | (\$22,357,976)        | (\$9,420,418)    | (\$7,615,926)      | -162                             |
| Food and Kindred Products           | (\$11,169,867)        | (\$2,386,145)    | (\$1,242,857)      | -33                              |
| Tobacco Manufactures                | (\$316)               | (\$51)           | (\$39)             | 0                                |
| Textile Mill products               | (\$405,785)           | (\$87,351)       | (\$82,652)         | -2                               |
| Apparel and Other Textile Products  | (\$1,128,030)         | (\$538,577)      | (\$300,725)        | -9                               |
| Lumber and Wood Products            | (\$763,738)           | (\$276,781)      | (\$185,353)        | -6                               |
| Furniture and Fixtures              | (\$5,764)             | (\$1,769)        | (\$1,577)          | 0                                |
| Paper and Allied Products           | (\$1,094,935)         | (\$375,380)      | (\$218,685)        | -4                               |
| Printing and Publishing             | (\$1,476,989)         | (\$796,357)      | (\$478,973)        | -10                              |
| Chemicals and Allied Products       | (\$3,914,538)         | (\$798,013)      | (\$613,037)        | -5                               |
| Petroleum Refining                  | (\$9,604,785)         | (\$1,516,615)    | (\$306,437)        | -2                               |
| Rubber and Plastic Products         | (\$1,167,282)         | (\$259,557)      | (\$203,538)        | -3                               |
| Leather and Leather Products        | (\$3,478)             | (\$1,486)        | (\$941)            | 0                                |
| Stone, Clay and Glass Products      | (\$810,988)           | (\$359,167)      | (\$217,582)        | -4                               |
| Primary Metals                      | (\$4,411,157)         | (\$1,151,249)    | (\$996,786)        | -16                              |
| Fabricated Metal Products           | (\$2,320,777)         | (\$934,321)      | (\$627,026)        | -14                              |
| Machinery, Except Electrical        | (\$4,212,596)         | (\$1,347,653)    | (\$1,216,274)      | -18                              |
| Electrical Machinery                | (\$3,105,947)         | (\$1,514,844)    | (\$1,085,273)      | -14                              |
| Motor Vehicles                      | (\$3,695,999)         | (\$1,079,483)    | (\$657,504)        | -6                               |
| Other Transportation Equipment      | (\$3,152,858)         | (\$1,474,386)    | (\$1,009,835)      | -19                              |
| Instruments                         | (\$24,253)            | (\$6,966)        | (\$8,121)          | 0                                |
| Miscellaneous Manufacturing         | (\$18,302)            | (\$4,665)        | (\$4,351)          | 0                                |
| Transportation and Warehousing      | (\$9,764,471)         | (\$5,028,037)    | (\$3,606,805)      | -69                              |
| Communication                       | (\$2,568,532)         | (\$1,633,248)    | (\$767,999)        | -10                              |
| Electric Utilities                  | (\$16,510,688)        | (\$3,166,466)    | (\$1,521,491)      | -7                               |
| Gas Utilities                       | (\$2,197,309)         | (\$281,432)      | (\$138,380)        | -1                               |
| Trade                               | (\$54,272,438)        | (\$38,196,059)   | (\$23,366,804)     | -771                             |
| Finance, Insurance, and Real Estate | (\$23,579,333)        | (\$8,678,603)    | (\$3,247,902)      | -43                              |
| Other Services                      | (\$42,145,929)        | (\$25,324,470)   | (\$21,879,939)     | -500                             |
| Government Enterprises              | (\$872,255)           | (\$532,058)      | (\$425,019)        | -9                               |
| Total                               | (\$292,370,110)       | (\$125,350,260)  | (\$87,658,669)     | -2,113                           |

Note: All monetary values are in constant 2005 dollars.

# Table Q.7 The Total Potential Impact of Efficiency Gains from Construction of All Aspects of TTC-69 Outlined in the Conceptual Plan on Business Activity in Texas Detailed Sectoral Results

| Sector                              | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-------------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry and Fisheries | \$464,796,348         | \$146,073,227    | \$77,527,699       | 5,796                            |
| Metal Mining                        | \$151,676,826         | \$62,359,025     | \$53,415,253       | 997                              |
| Coal Mining                         | \$322,533,475         | \$59,660,755     | \$87,626,414       | 1,470                            |
| Crude Petroleum and Natural Gas     | \$495,246,053         | \$119,884,553    | \$49,200,507       | 198                              |
| Nonmetallic Mineral Mining          | \$139,281,126         | \$48,117,342     | \$36,255,039       | 933                              |
| Construction                        | \$1,123,447,737       | \$473,358,943    | \$382,686,469      | 8,157                            |
| Food and Kindred Products           | \$517,751,761         | \$110,603,905    | \$57,609,570       | 1,527                            |
| Tobacco Manufactures                | \$15,326              | \$2,489          | \$1,878            | 0                                |
| Textile Mill products               | \$18,812,591          | \$4,049,663      | \$3,831,842        | 105                              |
| Apparel and Other Textile Products  | \$55,212,924          | \$26,361,380     | \$14,719,372       | 440                              |
| Lumber and Wood Products            | \$36,724,860          | \$13,309,222     | \$8,912,843        | 269                              |
| Furniture and Fixtures              | \$277,297             | \$85,101         | \$75,878           | 2                                |
| Paper and Allied Products           | \$51,717,327          | \$17,730,433     | \$10,329,213       | 189                              |
| Printing and Publishing             | \$70,742,038          | \$38,142,421     | \$22,940,925       | 459                              |
| Chemicals and Allied Products       | \$182,281,913         | \$37,159,784     | \$28,546,283       | 230                              |
| Petroleum Refining                  | \$439,779,015         | \$69,441,982     | \$14,030,962       | 96                               |
| Rubber and Plastic Products         | \$55,216,728          | \$12,277,998     | \$9,628,120        | 131                              |
| Leather and Leather Products        | \$175,063             | \$74,783         | \$47,338           | 1                                |
| Stone, Clay and Glass Products      | \$40,196,493          | \$17,802,047     | \$10,784,408       | 208                              |
| Primary Metals                      | \$203,056,047         | \$52,994,741     | \$45,884,438       | 731                              |
| Fabricated Metal Products           | \$110,582,942         | \$44,519,538     | \$29,877,226       | 664                              |
| Machinery, Except Electrical        | \$204,035,391         | \$65,273,052     | \$58,909,751       | 873                              |
| Electrical Machinery                | \$145,622,134         | \$71,023,355     | \$50,882,968       | 667                              |
| Motor Vehicles                      | \$178,500,626         | \$52,134,306     | \$31,754,575       | 283                              |
| Other Transportation Equipment      | \$151,129,350         | \$70,673,326     | \$48,405,493       | 908                              |
| Instruments                         | \$1,138,641           | \$327,069        | \$381,287          | 7                                |
| Miscellaneous Manufacturing         | \$886,169             | \$225,863        | \$210,661          | 3                                |
| Transportation and Warehousing      | \$511,357,002         | \$263,314,032    | \$188,885,281      | 3,596                            |
| Communication                       | \$117,358,577         | \$74,624,591     | \$35,090,549       | 477                              |
| Electric Utilities                  | \$331,630,295         | \$63,600,986     | \$30,560,356       | 139                              |
| Gas Utilities                       | \$100,489,784         | \$12,870,752     | \$6,328,561        | 29                               |
| Trade                               | \$2,571,745,563       | \$1,809,952,682  | \$1,107,255,864    | 36,527                           |
| Finance, Insurance, and Real Estate | \$1,137,050,400       | \$418,502,466    | \$156,621,416      | 2,075                            |
| Other Services                      | \$1,996,203,525       | \$1,199,470,440  | \$1,036,323,377    | 23,662                           |
| Government Enterprises              | \$41,614,868          | \$25,384,219     | \$20,277,444       | 445                              |
| Total                               | \$11,968,286,216      | \$5,481,386,470  | \$3,715,819,261    | 92,294                           |

Note: All monetary values are in constant 2005 dollars.

# Table Q.8 The Total Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for All TTC-69 Construction Projects Outlined in the Conceptual Plan on Business Activity in Texas—Detailed Sectoral Results

| Sector                              | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-------------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry and Fisheries | (\$33,685,289)        | (\$10,586,397)   | (\$5,618,682)      | -420                             |
| Metal Mining                        | (\$10,992,508)        | (\$4,519,359)    | (\$3,871,176)      | -72                              |
| Coal Mining                         | (\$23,375,040)        | (\$4,323,807)    | (\$6,350,569)      | -107                             |
| Crude Petroleum and Natural Gas     | (\$35,892,077)        | (\$8,688,420)    | (\$3,565,719)      | -14                              |
| Nonmetallic Mineral Mining          | (\$10,094,152)        | (\$3,487,219)    | (\$2,627,519)      | -68                              |
| Construction                        | (\$81,419,878)        | (\$34,305,848)   | (\$27,734,522)     | -591                             |
| Food and Kindred Products           | (\$37,523,139)        | (\$8,015,821)    | (\$4,175,151)      | -111                             |
| Tobacco Manufactures                | (\$1,111)             | (\$180)          | (\$136)            | 0                                |
| Textile Mill products               | (\$1,363,409)         | (\$293,492)      | (\$277,706)        | -8                               |
| Apparel and Other Textile Products  | (\$4,001,459)         | (\$1,910,494)    | (\$1,066,760)      | -32                              |
| Lumber and Wood Products            | (\$2,661,569)         | (\$964,562)      | (\$645,942)        | -20                              |
| Furniture and Fixtures              | (\$20,097)            | (\$6,168)        | (\$5,499)          | 0                                |
| Paper and Allied Products           | (\$3,748,121)         | (\$1,284,982)    | (\$748,591)        | -14                              |
| Printing and Publishing             | (\$5,126,903)         | (\$2,764,304)    | (\$1,662,603)      | -33                              |
| Chemicals and Allied Products       | (\$13,210,558)        | (\$2,693,089)    | (\$2,068,841)      | -17                              |
| Petroleum Refining                  | (\$31,872,202)        | (\$5,032,684)    | (\$1,016,869)      | -7                               |
| Rubber and Plastic Products         | (\$4,001,734)         | (\$889,826)      | (\$697,781)        | -10                              |
| Leather and Leather Products        | (\$12,687)            | (\$5,420)        | (\$3,431)          | 0                                |
| Stone, Clay and Glass Products      | (\$2,913,169)         | (\$1,290,172)    | (\$781,581)        | -15                              |
| Primary Metals                      | (\$14,716,126)        | (\$3,840,700)    | (\$3,325,393)      | -53                              |
| Fabricated Metal Products           | (\$8,014,302)         | (\$3,226,474)    | (\$2,165,299)      | -48                              |
| Machinery, Except Electrical        | (\$14,787,102)        | (\$4,730,548)    | (\$4,269,380)      | -63                              |
| Electrical Machinery                | (\$10,553,705)        | (\$5,147,291)    | (\$3,687,653)      | -48                              |
| Motor Vehicles                      | (\$12,936,516)        | (\$3,778,341)    | (\$2,301,356)      | -20                              |
| Other Transportation Equipment      | (\$10,952,831)        | (\$5,121,924)    | (\$3,508,102)      | -66                              |
| Instruments                         | (\$82,521)            | (\$23,704)       | (\$27,633)         | -1                               |
| Miscellaneous Manufacturing         | (\$64,224)            | (\$16,369)       | (\$15,267)         | 0                                |
| Transportation and Warehousing      | (\$37,059,690)        | (\$19,083,216)   | (\$13,689,125)     | -261                             |
| Communication                       | (\$8,505,354)         | (\$5,408,285)    | (\$2,543,125)      | -35                              |
| Electric Utilities                  | (\$24,034,316)        | (\$4,609,368)    | (\$2,214,807)      | -10                              |
| Gas Utilities                       | (\$7,282,818)         | (\$932,785)      | (\$458,651)        | -2                               |
| Trade                               | (\$186,382,688)       | (\$131,173,103)  | (\$80,246,401)     | -2,647                           |
| Finance, Insurance, and Real Estate | (\$82,405,707)        | (\$30,330,222)   | (\$11,350,859)     | -150                             |
| Other Services                      | (\$144,671,302)       | (\$86,929,488)   | (\$75,105,695)     | -1,715                           |
| Government Enterprises              | (\$3,015,964)         | (\$1,839,676)    | (\$1,469,572)      | -32                              |
| Total                               | (\$867,380,270)       | (\$397,253,741)  | (\$269,297,396)    | -6,689                           |

Note: All monetary values are in constant 2005 dollars.

# The Gross Potential Impact of Efficiency Gains from Construction of Other Priority Corridors in the TTC Conceptual Plan on Business Activity in Texas Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$523,226,534         | \$164,436,292    | \$87,273,813       | 6,525                            |
| Metal Mining                      | \$180,811,401         | \$74,337,147     | \$63,675,427       | 1,188                            |
| Coal Mining                       | \$384,486,746         | \$71,120,586     | \$104,457,979      | 1,753                            |
| Crude Petroleum & Natural Gas     | \$557,921,449         | \$135,056,429    | \$55,427,031       | 223                              |
| Nonmetallic Mineral Mining        | \$166,034,694         | \$57,359,876     | \$43,219,023       | 1,113                            |
| Construction                      | \$1,262,037,926       | \$531,753,208    | \$429,895,243      | 9,163                            |
| Food & Kindred Products           | \$582,754,390         | \$124,489,989    | \$64,842,329       | 1,718                            |
| Tobacco Manufactures              | \$17,232              | \$2,799          | \$2,112            | 0                                |
| Textile Mill products             | \$21,174,374          | \$4,558,069      | \$4,312,902        | 118                              |
| Apparel & Other Textile Products  | \$62,062,276          | \$29,631,600     | \$16,545,361       | 494                              |
| Lumber & Wood Products            | \$41,298,259          | \$14,966,638     | \$10,022,772       | 303                              |
| Furniture & Fixtures              | \$311,825             | \$95,697         | \$85,326           | 3                                |
| Paper & Allied Products           | \$58,183,133          | \$19,947,128     | \$11,620,592       | 213                              |
| Printing & Publishing             | \$79,559,257          | \$42,896,455     | \$25,800,260       | 516                              |
| Chemicals & Allied Products       | \$205,143,524         | \$41,820,326     | \$32,126,528       | 259                              |
| Petroleum Refining                | \$495,145,386         | \$78,184,442     | \$15,797,402       | 108                              |
| Rubber & Plastic Products         | \$62,117,760          | \$13,812,513     | \$10,831,451       | 148                              |
| Leather & Leather Products        | \$196,652             | \$84,006         | \$53,176           | 1                                |
| Stone, Clay & Glass Products      | \$45,169,608          | \$20,004,518     | \$12,118,657       | 234                              |
| Primary Metals                    | \$228,589,130         | \$59,658,513     | \$51,654,131       | 823                              |
| Fabricated Metal Products         | \$124,381,537         | \$50,074,708     | \$33,605,321       | 747                              |
| Machinery, Except Electrical      | \$229,404,252         | \$73,388,815     | \$66,234,330       | 982                              |
| Electrical Machinery              | \$163,858,049         | \$79,917,442     | \$57,254,922       | 750                              |
| Motor Vehicles                    | \$200,708,468         | \$58,620,504     | \$35,705,265       | 318                              |
| Other Transportation Equipment    | \$169,962,696         | \$79,480,452     | \$54,437,660       | 1,021                            |
| Instruments                       | \$1,281,187           | \$368,014        | \$429,020          | 8                                |
| Miscellaneous Manufacturing       | \$996,358             | \$253,948        | \$236,856          | 3                                |
| Transportation & Warehousing      | \$573,899,998         | \$295,519,416    | \$211,987,441      | 4,036                            |
| Communication                     | \$132,140,622         | \$84,024,023     | \$39,510,422       | 537                              |
| Electric Utilities                | \$385,496,082         | \$73,931,517     | \$35,524,190       | 161                              |
| Gas Utilities                     | \$113,144,446         | \$14,491,563     | \$7,125,515        | 32                               |
| Trade                             | \$2,893,041,217       | \$2,036,075,335  | \$1,245,588,559    | 41,090                           |
| Finance, Insurance, & Real Estate | \$1,278,561,313       | \$470,586,935    | \$176,113,639      | 2,333                            |
| Other Services                    | \$2,245,620,337       | \$1,349,338,972  | \$1,165,807,405    | 26,618                           |
| Government Enterprises            | \$46,806,147          | \$28,550,793     | \$22,806,970       | 501                              |
| Total                             | \$13,515,544,267      | \$6,178,838,671  | \$4,192,129,028    | 104,040                          |

Note: All monetary values are in constant 2005 dollars.

# The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for Other Priority Corridor Construction Projects in the TTC Conceptual Plan on Business Activity in Texas—Detailed Sectoral Results

|                                   |                 |                 |                 | Employment |
|-----------------------------------|-----------------|-----------------|-----------------|------------|
|                                   | Total           | Gross           | Personal        | (Person-   |
| Sector                            | Expenditures    | Product         | Income          | Years)     |
| Agriculture, Forestry & Fisheries | (\$37,919,913)  | (\$11,917,228)  | (\$6,325,014)   | -473       |
| Metal Mining                      | (\$13,103,985)  | (\$5,387,453)   | (\$4,614,763)   | -86        |
| Coal Mining                       | (\$27,864,994)  | (\$5,154,338)   | (\$7,570,406)   | -127       |
| Crude Petroleum & Natural Gas     | (\$40,434,365)  | (\$9,787,975)   | (\$4,016,976)   | -16        |
| Nonmetallic Mineral Mining        | (\$12,033,069)  | (\$4,157,055)   | (\$3,132,222)   | -81        |
| Construction                      | (\$91,463,955)  | (\$38,537,869)  | (\$31,155,894)  | -664       |
| Food & Kindred Products           | (\$42,234,089)  | (\$9,022,191)   | (\$4,699,333)   | -125       |
| Tobacco Manufactures              | (\$1,249)       | (\$203)         | (\$153)         | 0          |
| Textile Mill products             | (\$1,534,575)   | (\$330,338)     | (\$312,570)     | -9         |
| Apparel & Other Textile Products  | (\$4,497,853)   | (\$2,147,498)   | (\$1,199,096)   | -36        |
| Lumber & Wood Products            | (\$2,993,018)   | (\$1,084,680)   | (\$726,383)     | -22        |
| Furniture & Fixtures              | (\$22,599)      | (\$6,935)       | (\$6,184)       | 0          |
| Paper & Allied Products           | (\$4,216,719)   | (\$1,445,633)   | (\$842,182)     | -15        |
| Printing & Publishing             | (\$5,765,916)   | (\$3,108,844)   | (\$1,869,828)   | -37        |
| Chemicals & Allied Products       | (\$14,867,412)  | (\$3,030,854)   | (\$2,328,313)   | -19        |
| Petroleum Refining                | (\$35,884,782)  | (\$5,666,278)   | (\$1,144,889)   | -8         |
| Rubber & Plastic Products         | (\$4,501,874)   | (\$1,001,037)   | (\$784,990)     | -11        |
| Leather & Leather Products        | (\$14,252)      | (\$6,088)       | (\$3,854)       | 0          |
| Stone, Clay & Glass Products      | (\$3,273,587)   | (\$1,449,792)   | (\$878,278)     | -17        |
| Primary Metals                    | (\$16,566,591)  | (\$4,323,645)   | (\$3,743,541)   | -60        |
| Fabricated Metal Products         | (\$9,014,331)   | (\$3,629,075)   | (\$2,435,486)   | -54        |
| Machinery, Except Electrical      | (\$16,625,665)  | (\$5,318,724)   | (\$4,800,215)   | -71        |
| Electrical Machinery              | (\$11,875,321)  | (\$5,791,875)   | (\$4,149,449)   | -54        |
| Motor Vehicles                    | (\$14,545,989)  | (\$4,248,417)   | (\$2,587,676)   | -23        |
| Other Transportation Equipment    | (\$12,317,744)  | (\$5,760,204)   | (\$3,945,273)   | -74        |
| Instruments                       | (\$92,852)      | (\$26,671)      | (\$31,092)      | -1         |
| Miscellaneous Manufacturing       | (\$72,209)      | (\$18,404)      | (\$17,166)      | 0          |
| Transportation & Warehousing      | (\$41,592,382)  | (\$21,417,244)  | (\$15,363,413)  | -293       |
| Communication                     | (\$9,576,657)   | (\$6,089,492)   | (\$2,863,448)   | -39        |
| Electric Utilities                | (\$27,938,143)  | (\$5,358,055)   | (\$2,574,552)   | -12        |
| Gas Utilities                     | (\$8,199,943)   | (\$1,050,250)   | (\$516,409)     | -2         |
| Trade                             | (\$209,668,020) | (\$147,560,941) | (\$90,271,817)  | -2,978     |
| Finance, Insurance, & Real Estate | (\$92,661,459)  | (\$34,104,952)  | (\$12,763,523)  | -169       |
| Other Services                    | (\$162,747,342) | (\$97,790,944)  | (\$84,489,819)  | -1,929     |
| Government Enterprises            | (\$3,392,192)   | (\$2,069,168)   | (\$1,652,895)   | -36        |
| Total                             | (\$979,515,047) | (\$447,800,350) | (\$303,817,100) | -7,540     |

Note: All monetary values are in constant 2005 dollars.

# The Gross Potential Impact of Efficiency Gains from Construction of Other Non-Priority Corridors in the TTC Conceptual Plan on Business Activity in Texas—Detailed Sectoral Results

| Sector                            | Total<br>Expenditures | Gross<br>Product | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Agriculture, Forestry & Fisheries | \$970,347,390         | \$304,954,579    | \$161,853,252      | 12,100                           |
| Metal Mining                      | \$335,322,962         | \$137,861,619    | \$118,088,974      | 2,203                            |
| Coal Mining                       | \$713,048,148         | \$131,896,359    | \$193,722,070      | 3,250                            |
| Crude Petroleum & Natural Gas     | \$1,034,690,687       | \$250,468,286    | \$102,791,948      | 413                              |
| Nonmetallic Mineral Mining        | \$307,918,887         | \$106,376,498    | \$80,151,643       | 2,064                            |
| Construction                      | \$2,340,506,699       | \$986,160,495    | \$797,260,269      | 16,993                           |
| Food & Kindred Products           | \$1,080,744,504       | \$230,872,344    | \$120,253,047      | 3,187                            |
| Tobacco Manufactures              | \$31,958              | \$5,191          | \$3,916            | 0                                |
| Textile Mill products             | \$39,268,839          | \$8,453,146      | \$7,998,473        | 219                              |
| Apparel & Other Textile Products  | \$115,097,311         | \$54,953,149     | \$30,684,123       | 916                              |
| Lumber & Wood Products            | \$76,589,499          | \$27,756,311     | \$18,587,687       | 562                              |
| Furniture & Fixtures              | \$578,294             | \$177,475        | \$158,240          | 5                                |
| Paper & Allied Products           | \$107,903,264         | \$36,992,856     | \$21,550,917       | 395                              |
| Printing & Publishing             | \$147,546,258         | \$79,553,426     | \$47,847,755       | 957                              |
| Chemicals & Allied Products       | \$380,447,990         | \$77,557,695     | \$59,580,107       | 480                              |
| Petroleum Refining                | \$918,269,626         | \$144,996,601    | \$29,297,001       | 201                              |
| Rubber & Plastic Products         | \$115,200,210         | \$25,615,933     | \$20,087,418       | 274                              |
| Leather & Leather Products        | \$364,700             | \$155,792        | \$98,617           | 2                                |
| Stone, Clay & Glass Products      | \$83,769,092          | \$37,099,289     | \$22,474,600       | 434                              |
| Primary Metals                    | \$423,928,931         | \$110,639,423    | \$95,794,934       | 1,527                            |
| Fabricated Metal Products         | \$230,671,214         | \$92,865,823     | \$62,322,595       | 1,385                            |
| Machinery, Except Electrical      | \$425,440,613         | \$136,102,894    | \$122,834,575      | 1,821                            |
| Electrical Machinery              | \$303,882,201         | \$148,210,529    | \$106,181,855      | 1,392                            |
| Motor Vehicles                    | \$372,222,977         | \$108,714,389    | \$66,217,037       | 590                              |
| Other Transportation Equipment    | \$315,203,545         | \$147,400,111    | \$100,957,114      | 1,893                            |
| Instruments                       | \$2,376,020           | \$682,499        | \$795,637          | 14                               |
| Miscellaneous Manufacturing       | \$1,847,791           | \$470,958        | \$439,260          | 6                                |
| Transportation & Warehousing      | \$1,064,323,633       | \$548,054,190    | \$393,140,346      | 7,486                            |
| Communication                     | \$245,060,789         | \$155,826,371    | \$73,273,874       | 996                              |
| Electric Utilities                | \$714,920,007         | \$137,109,359    | \$65,881,224       | 299                              |
| Gas Utilities                     | \$209,831,518         | \$26,875,263     | \$13,214,592       | 60                               |
| Trade                             | \$5,365,276,439       | \$3,775,994,258  | \$2,310,000,601    | 76,204                           |
| Finance, Insurance, & Real Estate | \$2,371,150,072       | \$872,724,862    | \$326,610,748      | 4,326                            |
| Other Services                    | \$4,164,604,989       | \$2,502,410,458  | \$2,162,042,823    | 49,365                           |
| Government Enterprises            | \$86,804,127          | \$52,948,744     | \$42,296,562       | 928                              |
| Total                             | \$25,065,191,185      | \$11,458,937,171 | \$7,774,493,834    | 192,947                          |

Note: All monetary values are in constant 2005 dollars.

# The Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for Other Non-Priority Corridor Construction Projects in the TTC Conceptual Plan on Business Activity in Texas—Detailed Sectoral Results

|                                   |                   |                 |                 | Employment |
|-----------------------------------|-------------------|-----------------|-----------------|------------|
|                                   | Total             | Gross           | Personal        | (Person-   |
| Sector                            | Expenditures      | Product         | Income          | Years)     |
| Agriculture, Forestry & Fisheries | (\$70,324,202)    | (\$22,101,041)  | (\$11,730,027)  | -877       |
| Metal Mining                      | (\$24,301,936)    | (\$9,991,276)   | (\$8,558,288)   | -160       |
| Coal Mining                       | (\$51,676,897)    | (\$9,558,954)   | (\$14,039,663)  | -236       |
| Crude Petroleum & Natural Gas     | (\$74,987,368)    | (\$18,152,244)  | (\$7,449,664)   | -30        |
| Nonmetallic Mineral Mining        | (\$22,315,874)    | (\$7,709,448)   | (\$5,808,848)   | -150       |
| Construction                      | (\$169,624,063)   | (\$71,470,229)  | (\$57,780,021)  | -1,232     |
| Food & Kindred Products           | (\$78,325,037)    | (\$16,732,063)  | (\$8,715,126)   | -231       |
| Tobacco Manufactures              | (\$2,316)         | (\$376)         | (\$284)         | 0          |
| Textile Mill products             | (\$2,845,939)     | (\$612,627)     | (\$579,675)     | -16        |
| Apparel & Other Textile Products  | (\$8,341,473)     | (\$3,982,632)   | (\$2,223,777)   | -66        |
| Lumber & Wood Products            | (\$5,550,688)     | (\$2,011,589)   | (\$1,347,110)   | -41        |
| Furniture & Fixtures              | (\$41,911)        | (\$12,862)      | (\$11,468)      | 0          |
| Paper & Allied Products           | (\$7,820,097)     | (\$2,680,991)   | (\$1,561,864)   | -29        |
| Printing & Publishing             | (\$10,693,153)    | (\$5,765,493)   | (\$3,467,681)   | -69        |
| Chemicals & Allied Products       | (\$27,572,292)    | (\$5,620,856)   | (\$4,317,962)   | -35        |
| Petroleum Refining                | (\$66,549,959)    | (\$10,508,371)  | (\$2,123,248)   | -15        |
| Rubber & Plastic Products         | (\$8,348,930)     | (\$1,856,469)   | (\$1,455,800)   | -20        |
| Leather & Leather Products        | (\$26,431)        | (\$11,291)      | (\$7,147)       | 0          |
| Stone, Clay & Glass Products      | (\$6,071,016)     | (\$2,688,705)   | (\$1,628,807)   | -31        |
| Primary Metals                    | (\$30,723,496)    | (\$8,018,396)   | (\$6,942,568)   | -111       |
| Fabricated Metal Products         | (\$16,717,486)    | (\$6,730,285)   | (\$4,516,719)   | -100       |
| Machinery, Except Electrical      | (\$30,833,052)    | (\$9,863,815)   | (\$8,902,218)   | -132       |
| Electrical Machinery              | (\$22,023,322)    | (\$10,741,295)  | (\$7,695,341)   | -101       |
| Motor Vehicles                    | (\$26,976,199)    | (\$7,878,882)   | (\$4,798,962)   | -43        |
| Other Transportation Equipment    | (\$22,843,817)    | (\$10,682,561)  | (\$7,316,687)   | -137       |
| Instruments                       | (\$172,198)       | (\$49,463)      | (\$57,662)      | -1         |
| Miscellaneous Manufacturing       | (\$133,915)       | (\$34,132)      | (\$31,835)      | 0          |
| Transportation & Warehousing      | (\$77,134,963)    | (\$39,719,253)  | (\$28,492,148)  | -542       |
| Communication                     | (\$17,760,345)    | (\$11,293,239)  | (\$5,310,394)   | -72        |
| Electric Utilities                | (\$51,812,557)    | (\$9,936,757)   | (\$4,774,625)   | -22        |
| Gas Utilities                     | (\$15,207,166)    | (\$1,947,737)   | (\$957,704)     | -4         |
| Trade                             | (\$388,838,873)   | (\$273,658,472) | (\$167,413,188) | -5,523     |
| Finance, Insurance, & Real Estate | (\$171,844,887)   | (\$63,249,183)  | (\$23,670,533)  | -314       |
| Other Services                    | (\$301,822,344)   | (\$181,357,750) | (\$156,690,211) | -3,578     |
| Government Enterprises            | (\$6,290,975)     | (\$3,837,366)   | (\$3,065,368)   | -67        |
| Total                             | (\$1,816,555,178) | (\$830,466,103) | (\$563,442,621) | -13,983    |

Note: All monetary values are in constant 2005 dollars.

# Table Q.13 The Total Gross Potential Impact of Efficiency Gains from Construction of Other Non-Priority Corridors in the TTC Conceptual Plan on Business Activity in Texas—Detailed Sectoral Results

|                                   |                       |                  | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|------------------|--------------------|----------------------------------|
| Sector                            | Total<br>Expenditures | Gross<br>Product |                    |                                  |
|                                   |                       |                  |                    |                                  |
| Metal Mining                      | \$775,128,098         | \$318,679,084    | \$272,972,902      | 5,093                            |
| Coal Mining                       | \$1,648,272,613       | \$304,889,868    | \$447,805,360      | 7,514                            |
| Crude Petroleum & Natural Gas     | \$2,469,908,279       | \$597,892,395    | \$245,374,475      | 986                              |
| Nonmetallic Mineral Mining        | \$711,781,203         | \$245,898,498    | \$185,277,473      | 4,770                            |
| Construction                      | \$5,596,156,568       | \$2,357,911,871  | \$1,906,251,023    | 40,630                           |
| Food & Kindred Products           | \$2,581,170,423       | \$551,398,470    | \$287,203,503      | 7,611                            |
| Tobacco Manufactures              | \$76,373              | \$12,405         | \$9,359            | 0                                |
| Textile Mill products             | \$93,787,046          | \$20,188,923     | \$19,103,012       | 523                              |
| Apparel & Other Textile Products  | \$275,100,319         | \$131,346,498    | \$73,339,786       | 2,190                            |
| Lumber & Wood Products            | \$183,015,889         | \$66,325,618     | \$44,416,560       | 1,342                            |
| Furniture & Fixtures              | \$1,381,884           | \$424,091        | \$378,129          | 12                               |
| Paper & Allied Products           | \$257,777,535         | \$88,374,779     | \$51,484,469       | 944                              |
| Printing & Publishing             | \$352,552,532         | \$190,087,923    | \$114,329,209      | 2,287                            |
| Chemicals & Allied Products       | \$908,693,813         | \$185,245,288    | \$142,306,113      | 1,146                            |
| Petroleum Refining                | \$2,192,737,151       | \$346,237,560    | \$69,958,343       | 480                              |
| Rubber & Plastic Products         | \$275,215,517         | \$61,196,956     | \$47,989,227       | 655                              |
| Leather & Leather Products        | \$872,018             | \$372,507        | \$235,798          | 4                                |
| Stone, Clay & Glass Products      | \$200,255,248         | \$88,688,168     | \$53,726,935       | 1,036                            |
| Primary Metals                    | \$1,012,379,020       | \$264,216,530    | \$228,766,604      | 3,647                            |
| Fabricated Metal Products         | \$551,134,478         | \$221,880,987    | \$148,905,146      | 3,309                            |
| Machinery, Except Electrical      | \$1,016,721,658       | \$325,259,873    | \$293,551,131      | 4,353                            |
| Electrical Machinery              | \$725,888,730         | \$354,033,083    | \$253,638,455      | 3,325                            |
| Motor Vehicles                    | \$889,506,309         | \$259,796,254    | \$158,239,754      | 1,410                            |
| Other Transportation Equipment    | \$753,167,447         | \$352,207,223    | \$241,233,365      | 4,523                            |
| Instruments                       | \$5,675,751           | \$1,630,329      | \$1,900,590        | 35                               |
| Miscellaneous Manufacturing       | \$4,415,850           | \$1,125,494      | \$1,049,742        | 15                               |
| Transportation & Warehousing      | \$2,546,176,536       | \$1,311,107,520  | \$940,507,843      | 17,908                           |
| Communication                     | \$585,162,902         | \$372,086,500    | \$174,965,374      | 2,379                            |
| Electric Utilities                | \$1,676,277,025       | \$321,481,097    | \$154,472,083      | 701                              |
| Gas Utilities                     | \$501,048,241         | \$64,174,360     | \$31,554,593       | 143                              |
| Trade                             | \$12,818,062,916      | \$9,021,144,115  | \$5,518,771,190    | 182,057                          |
| Finance, Insurance, & Real Estate | \$5,666,250,154       | \$2,085,518,518  | \$780,489,697      | 10,338                           |
| Other Services                    | \$9,949,500,846       | \$5,978,414,528  | \$5,165,255,038    | 117,936                          |
| Government Enterprises            | \$207,401,683         | \$126,510,789    | \$101,059,458      | 2,218                            |
| Total                             | \$59,749,964,379      | \$27,344,028,215 | \$18,543,047,780   | 460,415                          |

Note: All monetary values are in constant 2005 dollars.

# The Total Offsetting Potential Impact of Foregone Efficiency Gains from Alternative Highway Construction Projects Stemming from Use of TxDOT Funds for Other Non-Priority Corridor Construction Projects in the TTC Conceptual Plan on Business Activity in Texas—Detailed Sectoral Results

| Sector                            |                       | Gross<br>Product  | Personal<br>Income | Employment<br>(Person-<br>Years) |
|-----------------------------------|-----------------------|-------------------|--------------------|----------------------------------|
|                                   | Total<br>Expenditures |                   |                    |                                  |
|                                   |                       |                   |                    |                                  |
| Metal Mining                      | (\$56,176,031)        | (\$23,095,700)    | (\$19,783,226)     | -369                             |
| Coal Mining                       | (\$119,455,628)       | (\$22,096,351)    | (\$32,453,898)     | -545                             |
| Crude Petroleum & Natural Gas     | (\$179,002,212)       | (\$43,331,189)    | (\$17,783,079)     | -71                              |
| Nonmetallic Mineral Mining        | (\$51,585,077)        | (\$17,821,057)    | (\$13,427,655)     | -346                             |
| Construction                      | (\$405,571,500)       | (\$170,885,472)   | (\$138,152,155)    | -2,945                           |
| Food & Kindred Products           | (\$187,065,738)       | (\$39,961,624)    | (\$20,814,563)     | -552                             |
| Tobacco Manufactures              | (\$5,535)             | (\$899)           | (\$678)            | 0                                |
| Textile Mill products             | (\$6,797,049)         | (\$1,463,156)     | (\$1,384,457)      | -38                              |
| Apparel & Other Textile Products  | (\$19,937,407)        | (\$9,519,104)     | (\$5,315,171)      | -159                             |
| Lumber & Wood Products            | (\$13,263,751)        | (\$4,806,831)     | (\$3,219,011)      | -97                              |
| Furniture & Fixtures              | (\$100,150)           | (\$30,735)        | (\$27,404)         | -1                               |
| Paper & Allied Products           | (\$18,681,969)        | (\$6,404,805)     | (\$3,731,245)      | -68                              |
| Printing & Publishing             | (\$25,550,618)        | (\$13,776,284)    | (\$8,285,806)      | -166                             |
| Chemicals & Allied Products       | (\$65,855,969)        | (\$13,425,323)    | (\$10,313,383)     | -83                              |
| Petroleum Refining                | (\$158,914,727)       | (\$25,092,952)    | (\$5,070,107)      | -35                              |
| Rubber & Plastic Products         | (\$19,945,755)        | (\$4,435,141)     | (\$3,477,934)      | -47                              |
| Leather & Leather Products        | (\$63,198)            | (\$26,997)        | (\$17,089)         | 0                                |
| Stone, Clay & Glass Products      | (\$14,513,143)        | (\$6,427,517)     | (\$3,893,764)      | -75                              |
| Primary Metals                    | (\$73,370,370)        | (\$19,148,623)    | (\$16,579,453)     | -264                             |
| Fabricated Metal Products         | (\$39,942,492)        | (\$16,080,430)    | (\$10,791,636)     | -240                             |
| Machinery, Except Electrical      | (\$73,685,095)        | (\$23,572,631)    | (\$21,274,596)     | -315                             |
| Electrical Machinery              | (\$52,607,495)        | (\$25,657,918)    | (\$18,381,996)     | -241                             |
| Motor Vehicles                    | (\$64,465,389)        | (\$18,828,272)    | (\$11,468,145)     | -102                             |
| Other Transportation Equipment    | (\$54,584,472)        | (\$25,525,592)    | (\$17,482,959)     | -328                             |
| Instruments                       | (\$411,340)           | (\$118,155)       | (\$137,742)        | -3                               |
| Miscellaneous Manufacturing       | (\$320,031)           | (\$81,568)        | (\$76,078)         | -1                               |
| Transportation & Warehousing      | (\$184,529,619)       | (\$95,020,187)    | (\$68,161,634)     | -1,298                           |
| Communication                     | (\$42,408,641)        | (\$26,966,308)    | (\$12,680,304)     | -172                             |
| Electric Utilities                | (\$121,485,198)       | (\$23,298,771)    | (\$11,195,090)     | -51                              |
| Gas Utilities                     | (\$36,312,581)        | (\$4,650,923)     | (\$2,286,863)      | -10                              |
| Trade                             | (\$928,966,326)       | (\$653,791,385)   | (\$399,963,132)    | -13,194                          |
| Finance, Insurance, & Real Estate | (\$410,651,408)       | (\$151,144,248)   | (\$56,564,603)     | -749                             |
| Other Services                    | (\$721,072,389)       | (\$433,274,966)   | (\$374,342,678)    | -8,547                           |
| Government Enterprises            | (\$15,031,068)        | (\$9,168,645)     | (\$7,324,105)      | -161                             |
| Total                             | (\$4,330,272,463)     | (\$1,981,709,841) | (\$1,343,874,428)  | -33,368                          |

Note: All monetary values are in constant 2005 dollars.