

# Cost of Infrastructure to Serve New Residential Development in Austin, Texas

January 2011

## Executive Summary

This study is the first systematic examination of the costs of public facilities and infrastructure required to serve new residential development in Austin, Texas. As shown in Table ES-1, there are 12 categories of basic infrastructure provided by local government in Austin. The first six categories were examined as *Part 1* of an envisioned multi-part project.

The study focused on costs and revenues associated with the expansion of the City’s capital facilities to serve residential development. Capital costs include all construction and land costs for buildings, roads, equipment, utility mains, and so forth. Capital costs do not include operating and maintaining city infrastructure or services for new development. The City of Austin typically funds new capital facilities through general obligation bonds. These bonds are re-paid through direct increases in local tax rates for the life of the bond. The study relied on existing data and reports from City, County, State, and Federal sources.

The basic unit of residential development evaluated in this study is the “typical new housing unit.” This housing unit represents the average of new units being built today. It is based on the mix of single-family and multifamily units built in recent years in Austin. The demand for infrastructure, and the associated costs and revenues calculated in this report, are based on serving this typical new housing unit.

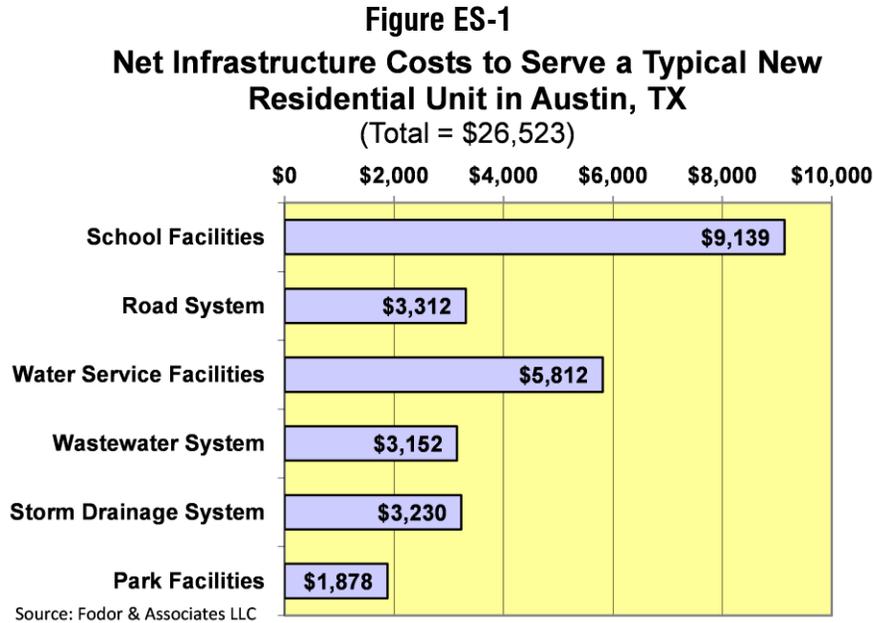
All costs and revenues are in current 2010 dollars and values, and no financing costs have been included. This approach was used in order to simplify the analysis and make the results more intuitive. However, financing costs are incurred whenever bonds are used to fund capital improvements and will significantly increase the ultimate costs.

**Table ES-1**

| <b>Basic Public Infrastructure Required by New Residential Development in Austin</b> |                          |                                 |
|--------------------------------------------------------------------------------------|--------------------------|---------------------------------|
|                                                                                      | <b>All Categories</b>    | <b>Included in this Report?</b> |
| 1                                                                                    | School Facilities        | Yes                             |
| 2                                                                                    | Transportation System    | Yes                             |
| 3                                                                                    | Water Service Facilities | Yes                             |
| 4                                                                                    | Sanitary Sewer System    | Yes                             |
| 5                                                                                    | Storm Drainage System    | Yes                             |
| 6                                                                                    | Parks & Rec. Facilities  | Yes                             |
| 7                                                                                    | Fire & EMS Facilities    | No                              |
| 8                                                                                    | Police Facilities        | No                              |
| 9                                                                                    | Library Facilities       | No                              |
| 10                                                                                   | General Gov. Facilities  | No                              |
| 11                                                                                   | Solid Waste Facilities   | No                              |
| 12                                                                                   | Power Gen. & Dist. Sys.  | No                              |

## Findings

The total net cost for serving a typical new residential unit in Austin with the six types of infrastructure evaluated in this study is \$26,523. This is the cost after deducting credits for impact fees and future tax contributions of the development, as explained in the report. Impact fees paid by a typical new residential unit total \$1,818. Future tax revenues and utility payments that will go towards repayment of the bonds total \$541. The net costs for each category of infrastructure evaluated are shown in Figure ES-1 below.

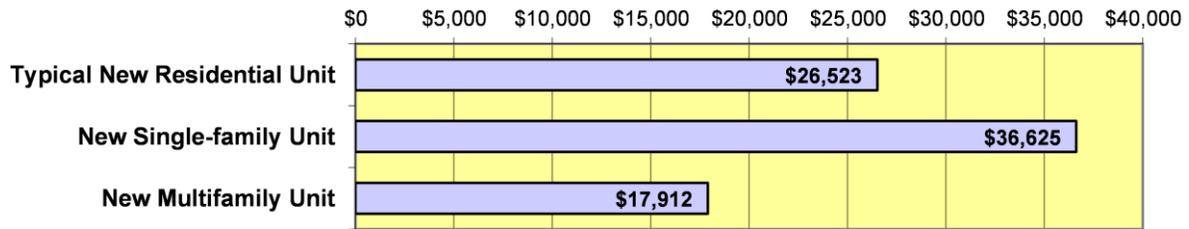


The net cost of \$26,523 is the amount ultimately paid by the taxpayers and ratepayers of Austin, and not by the new development itself. At a forecasted growth rate of 1.5% per year, residential development will cost the City \$122 million each year. The forecasted residential growth over the next 20 years will cost \$2.75 billion in current dollars.

While the primary focus of the study was on a “typical new residential unit,” the costs were also estimated for an average new single-family and multifamily residential unit. The net costs, after deducting impact fees and tax contributions, are \$36,625 for a new single-family unit and \$17,912 for a multifamily unit, as shown in Figure ES-2 below.

Figure ES-2

### Net Infrastructure Cost by Housing Type



These costs can be viewed as a subsidy of new development by established residents and businesses of the City. While all private property owners and utility ratepayers in Austin pay for this infrastructure, it is being built to serve new development.

The argument is sometimes made that everyone can use the new park, road, or sewage treatment plant, so everyone should pay for it. However, there is no need for continually expanding the capacity of these facilities, other than to accommodate growth. The costs calculated here are only those for serving the new development itself, and do not include any excess capacity that may be used by others. The fact that these facilities are common public assets does not diminish the impact of new development.

Impact fees are widely used around the country to recover some or all of these infrastructure costs directly from the development. Impact fees reduce the reliance on the general tax base (or utility rate base) to finance growth-related costs and can reduce the need for future tax increases.

The State of Texas authorizes impact fees for four categories of infrastructure: roadway, water, wastewater and stormwater facilities. Austin collects only two of these (water and wastewater), and the fees are set at less than 38% of the full cost calculated by the City. Austin's impact fees are relatively low compared with other cities charging such fees. The average among cities in the U.S. that collect impact fees was a total of \$11,796 for a single-family house in 2010, whereas Austin charges from \$2,250 to \$4,050 in impact fees for a single-family house within City limits.

This evaluation of costs for six of the twelve basic infrastructure categories required by development provides new insight into the fiscal impacts of residential development in Austin. Additional research on the remaining six categories will yield a more-complete picture of the costs associated with residential development in the City. □

#### Austin Case Study

The costs of providing infrastructure to new development are illustrated in the City of Austin's *SH 130 Infrastructure District Report*, conducted in 2006 to study the fiscal impacts of a proposed development district along the SH 130 corridor. The City examined only four categories of infrastructure, but found that \$184 million to \$460 million in net costs would be transferred to City taxpayers. (See the full *SH 130 District Case Study* on page 5 of the report.)