

# Economic Impact Analysis of Proposed Bellwood Forest Development

Prepared for



Engineering and Development Consultants

Prepared by



**Hibbs Institute**

**for Business and Economic Research**

Business Building, UT Tyler, Tyler, TX 75799  
903.566.7360 | HibbsInstitute@uttyler.edu

Rodney Mabry, Ph.D., Executive Director  
Manuel Reyes-Loya, D.E.D., Senior Research Associate  
Marilyn Young, Ph.D., *Hibbs* Faculty Research Fellow

Dr. Manuel Reyes-Loya is Project Leader for the Bellwood Analysis

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# EXECUTIVE SUMMARY

## Economic Impact Analysis of Proposed Bellwood Forest Development (Smith County, Texas - Dollar Amounts in 2018\$)

### Added Business Volume for Smith County, 7-Year Project (in millions):

Resulting from Capital Investment (over seven years)	\$907.3 mil
Resulting from Residents' Spending (last five years)	\$503.4 mil
Total added for Smith County	<u>\$1,410.7 mil</u>

### Added Labor Income for Smith County, 7-Year Project (in millions):

Resulting from Capital Investment (over seven years)	\$314.6 mil
Resulting from Residents' Spending (last five years)	\$180.5 mil
Total added for Smith County	<u>\$495.1 mil</u>

### Added Employment for Smith County:

Capital Investment Employment	941 jobs (seven-year average) 1,772 jobs (the largest in 2020) 137 jobs (last year of construction, 2024)
Residents' Spending	803 jobs (last five years average) 1,258 jobs (largest in 2024) 1,258 jobs (last year of construction, 2024)
Total Added Jobs	758 jobs (seven-year average) 1,228 jobs (likely continuing into foreseeable future)

### City of Tyler Property and Sales Tax Revenue:

Sales Tax (general and ½ cent)	\$6.78 mil (seven-year total)
Property Tax	\$1.89 mil (seven-year total)
Total City Tax Revenue (Sales and Property)	<u>\$8.67 mil (seven-year total)</u> \$16.91 mil (twelve-year total)

# Economic Impact Analysis of Proposed Bellwood Forest Development

## Introduction

The *Hibbs Institute for Business and Economic Research* at The University of Texas at Tyler was contracted by Adams Engineering and Development Consultants to conduct an economic impact analysis for a planned residential development project (with some commercial development) in Southwest Tyler, called the Bellwood Forest Development project. This project is intended to provide homes for 3,000 to 5,000 international students of various ages, but mostly in high school, and one or two parents or guardians each. Required middle and high school education would be provided primarily on campus—in a new school built for that purpose—although a portion of the students with strongest language skills would be taught (tuition paid by the developer) by some area private schools.

This *Hibbs Institute* economic impact analysis examines the immediate and secondary economic effects of the two primary parts of the project: the capital investment required to construct the buildings, infrastructure and landscaping for the project; and the subsequent consumer spending expected from its future residents. Because its residents come from outside the region, this project introduces new money into the local economy beyond the millions spent building it. This new consumer spending is continuous and from external sources, making the project's economic impact larger than a standard residential development. The economic impact of the Bellwood Forest project shares common elements with adding a university of 10,000 students or a large medical center whose patients come from outside the region.

In this study, the *Hibbs Institute* estimates the economic effects of plans that are newer and scaled back compared to those first submitted to the Tyler Planning and Zoning Commission in early 2018. Current Bellwood Forest plans call for total developer spending to be \$574.7 million to construct several buildings containing 2,964 residential units. The project is to be developed within the Bellwood Park property, located at the northwest corner of the intersection of Loop 323 and Earl Campbell Parkway next to Bellwood Lake. See *Figure 1* next page. This primarily residential complex is to be developed over 7 years.

The Bellwood Forest Development project also includes plans for constructing a community building with normal amenities, plus substantial educational facilities and some basic shopping and personal service business spaces. The project reserves land for future development of additional restaurant and other commercial buildings in other phases. These potential future commercial developments (future phases) were not considered in this study (beyond the initial investment in the land).

**Figure 1. Bellwood Park Property.**



Source: Google maps; satellite view.

## Methodology

To estimate the economic impact of the Bellwood Forest Development Project in Smith County, a modeling technique known as Input-Output (I-O) analysis is used by *Hibbs Institute* researchers. I-O analysis illustrates how industries are linked by the intermediate inputs they provide one another to produce the final output in an economy.<sup>1</sup> Basically, an I-O model captures all rounds of inter-industry relationships that make up the production processes of industries in a given economy. Therefore, an I-O model can be used to estimate the regional effects of a specific change, sometimes called a “shock”, to that region’s economy. Adding a half-billion dollar investment of outside funds to the Smith County economy would qualify as such an economic shock.

Inter-industry relationships and their overall economic effects on a region are measured or represented by calculated ratios called multipliers. Multipliers calculate the total change in an economy resulting from a one unit change in production, employment, income, or some other form

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<sup>1</sup> Miernyk, W. H. (1965). *Elements of Input-Output Analysis*. New York: Random House.

of value added. For example, an employment multiplier of 2 suggests that for every one job created by an investment shock in a given industry, an additional job will be generated within the region.

It is important to note that different industries or sectors have very different multipliers. Typically, industries with a considerable number of inter-industry linkages, such as manufacturing or construction, are better economic drivers (their overall multipliers are larger, typically ranging between 1.6 and 1.8), compared to industries with less interdependence with other industries, such as wholesale or retail activities that have smaller multipliers.

**Hibbs Institute** researchers chose to use IMPLAN Pro Version 3.<sup>2</sup> IMPLAN is widely accepted and used extensively by numerous (several thousand) public and private organizations, including many universities, as the core model to conduct economic impact studies.<sup>3</sup> In particular, the Tyler Economic Development Corporation has relied upon economic impact analyses using this software in the past, and it was recommended for this study. The latest data is for 2016.

IMPLAN is a county-based model and all of this report's estimates of increased output and employment refer to amounts generated in Smith County. Certain tax estimates for the County are disaggregated further using individual tax rates of the various taxing entities in the county.

Like most traditional regional economic input-output models, IMPLAN employs a top-down approach, using national data or totals as control numbers for state data; then state data or totals, in turn, are used as control numbers for county data. IMPLAN then employs national databases such as the U.S. Census, the U.S. Bureau of Economic Analysis (BEA), or U.S. Bureau of Labor Statistics (BLS) to develop locally accurate estimates for unknown figures (e.g., sales, employment, wages, salaries, proprietor income and others) while conducting a complete regional economic impact analysis.

IMPLAN explicitly breaks out the total economic impact into three component types of effects: the direct, the indirect, and the induced economic effects.

- Direct effects refer to the initial change in demand from the initial spending—in this case, the additional spending on land, steel, lumber, other supplies and services bought, plus labor employed and is equal to the initial expenditures.
- Indirect effects sum up all of the second-, third- and other-round increases in business activity across all industries that result from the spending by the firms that received the initial investment and, in turn, have to buy resources to complete their bargain or must replenish existing resources. Thus, these indirect effects include increases in both production and employment down the industry supply chain that result from the direct effect.

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<sup>2</sup> IMPLAN (data and software), 16905 Northcross Drive, Suite 120, Huntersville, NC 28078. //: [www.IMPLAN.com](http://www.IMPLAN.com)

<sup>3</sup> Bonn, M. A., & Harrington, J. (2008). A comparison of the three economic impact models for applied hospitality and tourism research. *Tourism Economics*, 14 (4) 769 – 789.

- Induced effects measure the impact of household spending on goods and services within a region due to using (spending) the added income or compensation workers and business proprietors receive in both the directly and indirectly impacted regional industries. They may spend it in any sector—retail, entertainment, housing, and so on—but IMPLAN will capture those effects relatively accurately based on past spending patterns across all industries.

A reminder: the sum of these three economic effects represents the total economic impact of the new expenditure spread out across the region.

Economic impact results are, however, commonly presented in the form of three key economic variables of interest to local governments and other stakeholders: output or business volume generated, added labor income, and new employment.

- Output or Business Volume. New output from a given investment is the total increase in business spending or business volume for the region, and includes the initial direct investment, indirect business spending across all related industries and induced spending by households that receive wages.
- Labor Income. The sum of compensation paid to workers, including profit to business proprietors, is labor income. Any increase in labor income, due to a new investment, is the sum of the increases in compensation to all workers and owners across all the industries that see an increase in sales or business resulting from all “rounds” of spending after the initial investment. Note that when interpreting the results of this study, labor income and business output figures should not be summed, because labor income is a component of output or business volume.
- Employment. Employment is the sum of all workers needed to produce any level of output. Given any new investment, estimated new employment is the sum of all employees required for the increased economic activity. These estimates are based on actual data from the recent past in the region examined, in this case Smith County. Employment numbers, although just as easy for a good model to estimate as dollar output, are nevertheless a bit tricky to interpret because they represent the average number of jobs added or *supported* annually and consist of both full-time and part-time positions.

Finally, for this study of the proposed Bellwood Development, *Hibbs Institute* researchers also estimate overall changes in tax revenues for the area using IMPLAN. These tax changes—which are sales and property taxes, plus some minor fees, in Smith County and Tyler—are associated with overall business expenditures (direct and indirect) as well as household spending. For this study, overall tax revenue increases are calculated for the entire county and are then disaggregated to show what each government entity would receive during the period studied.

## Data

The Bellwood Forest Development project intends to develop a residential complex in Southwest Tyler, constructing nearly 3,000 units (2,964) distributed throughout the property in 1- to 6-story buildings. The residential complex is to be developed over 7 years, starting in 2018 and finishing in 2024, with most of the capital investment occurring in years 2019 through 2023. The flow of residents into the complex is expected to be in groups of 500 to 800 individuals per year during the last five years of the project, from 2020 to 2024 as individual buildings are completed.

*Hibbs Institute* data for the impact of the capital outlays portion of the study are based on a *Pro Forma Project Development Expense Analysis* provided by Adams Engineering and Development Consultants. The basic elements of this *pro forma* capital investment analysis are summarized in **Table 1**. While this table presents summary totals for this report, researchers were given more detailed breakdowns. Researchers used the most detailed or specific data available whenever possible in order to increase accuracy. Per client’s information, the Local Purchase Percentage (LPP) used is 100 percent. This implies that all construction supplies would be bought in Smith County, Texas.

**Table 1. Pro Forma Project Development Expense Analysis (Summary Data).**

<b>Capital Investment (2018 - 2024)</b>	
<b>Construction</b>	\$543,188,850
<i>Residential buildings</i>	
<i>Parking lots and garages</i>	
<i>Community premises</i>	
<i>Shopping centers</i>	
<i>Land development</i>	
<i>Education facilities</i>	
<b>Professional Services</b>	\$31,500,000
<i>Architectural / Design</i>	
<i>Civil Engineering</i>	
<i>Legal</i>	
<i>Accounting</i>	
<b>Total</b>	<b>\$574,688,850</b>

Source: Adams Engineering and Development Consultants.

For the portion of the study estimating the total economic impact on Smith County of the residents’ consumer spending, *Hibbs Institute* also relied on Adams Engineering data. Adding nearly 3,000 new households—and their expected consumer spending—from outside the region is far different

from adding a residential development that simply moves local citizens across town. These new Bellwood Forest residents come with income earned outside the region and with several immediate needs, from new furniture and transportation to food and entertainment, including new clothes, if they wish to fit in. Thus, the *Hibbs Institute* bases this part of its analysis on the information that there will be 2,964 households when the project is completed; that they will arrive and occupy units as they are completed; and that each new household would have \$50,000 to spend annually, possibly a conservative figure.<sup>4</sup>

Based on the construction timeline, households would begin filling completed residential units in 2020. Progressively, more households would occupy units as they are completed, generally in groups of nearly 500 to nearly 800 persons per year until the buildings are finished and fully occupied in 2024. The unit construction timetable and corresponding number of households projected to be in place and ready to consume are detailed below in *Table 2*.

**Table 2. Construction Projections (Buildings and available units).**

	2020	2021	2022	2023	2024
Buildings	(1)4-story (1)6-story	(3)4-story (1)6-story	(4)4-story	(4)4-story	(3)4-story
Units available	494	798	608	608	456
Accumulated units	494	1292	1900	2508	2964

Source: Adams Engineering and Development Consultants.

Finally, Adams Engineering requested that *Hibbs Institute* researchers also estimate any added property and sales tax revenue the City of Tyler would receive from the Bellwood Forest project. Total state and local tax (including, to a small extent, fee) revenues were generated by IMPLAN as a result of the capital investment for the project and the consumer spending that would follow, still not going beyond the seven-year timeline for the project. The estimated state and local tax revenues that would come to Smith County and the cities and localities within it were then disaggregated into the portion or shares of these tax revenues that each state, county, and city government would receive, according to the information in *Table 3*.<sup>5</sup> Researchers are aware that the current City of Tyler Council has allocated 1 cent of its 24 cents per \$100 of valuation of property tax to street pavement maintenance.

<sup>4</sup> “Conservative” because this amount is less the amount provided by the developer; his marketing materials say that each new household must have \$60,000 of long-term annual income available for spending when they move to Tyler.

<sup>5</sup> Property and Sales Tax shares for Texas, Smith County, and City of Tyler are provided by the City of Tyler Comptroller’s Office.



**Table 3. State, Smith County, and City of Tyler Shares of Property and Sales Taxes.**

<b>Property Tax</b>	<b>Per \$100 of valuation</b>	<b>Sales Tax</b>	<b>(%)</b>
<i>Smith County Portion</i>	\$ 0.33	<i>Sales Tax charged in Texas</i>	8.25
<i>City of Tyler Portion</i>	\$ 0.24	<i>State share</i>	6.25
<i>Tyler Junior College Portion</i>	\$ 0.19993	<i>Smith County share</i>	0.50
<i>Tyler ISD Portion</i>	\$ 1.405	<i>City General Fund share</i>	1.00
<i>Whitehouse ISD Portion</i>	\$ 1.413	<i>City Half Cent Capital Improvement Fund</i>	0.50
<i>Chapel Hill ISD Portion</i>	\$ 1.23		

Source: City of Tyler Comptroller’s Office; <https://www.smithcad.org/taxrates.html>.

## Findings

### Capital Investment Impacts

The expenses anticipated for the Bellwood Forest Development project were classified into seven annual periods (2018 through 2024). Economic impact results are presented in Direct, Indirect, and Induced Effects in Business Volume, Labor Income, and Employment (**Table 4**).

Summing the total annual increased business volume, or total economic output, across the seven-year construction period yields a grand total increase in business volume of \$907.3 million during that period. Also, \$314.6 million of that increase in business volume for the period would be increased labor income (including proprietors’ income).

Effects on employment are to be interpreted as a person employed during one year, but annual impacts (years 2018 through 2024) cannot be added through time as they may be either continued jobs or new jobs, and thus may (or may not) be double-counted. Using a simple average over those same seven years, some 941 jobs are created or supported annually by the capital spending. Jobs supported peak at 1,772 in 2020 and declines to 173 in the last year of the project.

**Table 4. Economic Impacts of Capital Investment.**

	2018	2019	2020	2021	2022	2023	2024
<b>Business Volume</b>							
Direct Effect	\$5,355,000	\$90,264,011	\$149,784,727	\$111,947,344	\$110,157,740	\$77,518,322	\$11,363,879
Indirect Effect	\$1,495,164	\$34,578,131	\$56,361,976	\$41,950,479	\$41,385,097	\$29,331,410	\$3,611,573
Induced Effect	\$1,770,415	\$23,164,338	\$37,933,532	\$28,327,388	\$28,012,655	\$19,839,005	\$3,119,005
Total Effect	\$8,620,579	\$148,006,480	\$244,080,235	\$182,225,211	\$179,555,492	\$126,688,737	\$18,094,457
<b>Total Added Business Volume for Capital Investment, 7-Year Project</b>						<b>\$907,271,191</b>	
<b>Labor Income</b>							
Direct Effect	\$2,763,566	\$29,654,936	\$48,799,833	\$36,512,067	\$36,125,602	\$25,560,772	\$4,495,613
Indirect Effect	\$613,172	\$13,617,942	\$22,037,925	\$16,397,798	\$16,218,671	\$11,520,673	\$1,396,299
Induced Effect	\$609,504	\$7,970,436	\$13,052,131	\$9,746,911	\$9,638,725	\$6,826,347	\$1,073,510
Total Effect	\$3,986,242	\$51,243,314	\$83,889,889	\$62,656,776	\$61,982,998	\$43,907,792	\$6,965,422
<b>Total Added Labor Income for Capital Investment, 7-Year Project</b>						<b>\$314,632,433</b>	
<b>Employment</b>							
Direct Effect	37	638	1060	787	771	552	85
Indirect Effect	14	256	412	307	305	216	27
Induced Effect	14	183	300	224	221	157	25
Total Effect	64	1077	1772	1318	1297	925	137

Note: Dollar figures are reported in 2018 U.S. dollars; amounts may not add up due to rounding.

Source: *Hibbs Institute for Business and Economic Research*.

### **Residents' Spending Impacts**

The *Hibbs Institute* also estimates the expected economic impact resulting from the new residents' consumption spending, using households as the spending unit for each of the projected years for completed units (2020 through 2024). Estimates assume a "typical" arriving condominium buyer would spend \$12,000 on appliances, furnishings, and repairs/alterations during the initial year,<sup>6</sup> plus \$50,000 of annual consumption spending per household. The consumption spending patterns used in this research were developed from the consumer expenditure survey conducted by the Bureau of Labor Statistics (BLS).<sup>7</sup> Economic impact results are presented in the form of Direct, Indirect, and Induced Effects in Business Volume, Labor Income, and Employment (*Table 5*).

<sup>6</sup> Siniavskaia, N. (July 2017). Spending Patterns of Home Buyers: Appliances, Furnishings and Property Alterations. National Association of Home Builders. <https://www.HousingEconomics.com>

<sup>7</sup> Table 2100. Annual expenditure means, shares, standard errors, and coefficients of variation, Consumer Expenditure Survey, 2016. <https://www.bls.gov/cex/2016/combined/race.pdf>

**Table 5. Economic Impacts of Expected Residents' Spending.**

	2020	2021	2022	2023	2024
<b>Business Volume</b>					
Direct Effect	\$19,498,143	\$47,963,317	\$66,995,977	\$86,847,466	\$100,594,371
Indirect Effect	\$5,934,488	\$14,786,851	\$20,880,721	\$27,140,564	\$31,538,015
Induced Effect	\$4,986,191	\$12,180,066	\$16,910,737	\$21,887,695	\$25,305,346
Total Effect	\$30,418,822	\$74,930,234	\$104,787,435	\$135,875,725	\$157,437,732
<b>Total Added Business Volume for Resident's Spending, 7-Year Project</b>				<b>\$503,449,948</b>	
<b>Labor Income</b>					
Direct Effect	\$7,394,306	\$17,966,570	\$24,829,177	\$32,100,647	\$37,062,439
Indirect Effect	\$1,961,065	\$4,892,694	\$6,916,266	\$8,990,711	\$10,449,177
Induced Effect	\$1,715,857	\$4,191,455	\$5,819,431	\$7,532,148	\$8,708,274
Total Effect	\$11,071,228	\$27,050,719	\$37,564,874	\$48,623,506	\$56,219,890
<b>Total Added Labor Income for Resident's Spending, 7-Year Project</b>				<b>\$180,530,217</b>	
<b>Employment</b>					
Direct Effect	162	401	563	730	847
Indirect Effect	40	99	140	182	211
Induced Effect	39	96	134	173	200
Total Effect	242	597	836	1085	1258

Note: Dollar figures are reported in 2018 U.S. dollars; amounts may not add up due to rounding.  
 Source: *Hibbs Institute* for Business and Economic Research.

Summing over the five years of spending by residents during the project period yields a total of \$503.4 million of additional business volume for Smith County from this impact source. Also, \$180.5 million of that increased business volume would be additional labor income. Over those same five years, an average of 803 jobs are created or supported by residents' spending, peaking at 1,258 in the last year. Unlike the jobs created or supported by project capital outlays, these jobs that result from consumer spending are likely to be maintained years into the foreseeable future.

**City of Tyler Property and Sales Tax Revenue**

The *Hibbs Institute* used information provided by the City of Tyler Comptroller's Office and the IMPLAN model estimates of State and Local Tax Impacts to calculate the portion of property and sales tax revenues that would be received by the City. The calculated City Revenue (via both sales and property taxes) is shown in *Table 6*. Since three different Independent School Districts (ISDs) are contained in Smith County (Tyler, Whitehouse, and Chapel Hill), an average of their property tax rates was used to calculate the proportion of total property taxes that would go to the ISDs as a group.

Total City of Tyler added sales tax revenue of \$6,777,722 and added property tax revenue of \$1,894,438 during the seven-year construction project would together total \$8,672,159 during that

period. Those tax revenues would continue to be higher as a result of the residents’ continued spending beyond the construction period. For example, simply extending for five more years the Tyler added revenue in 2024—the final year when construction ends and all the residents are in place—yields another \$8,236,270 for the City. That makes the total new Tyler revenue over twelve years of the project equal to \$16,908,430.

**Table 6. State and Local Sales and Property Tax Revenue.**

	2018	2019	2020	2021	2022	2023	2024
<b>Sales Tax</b>	\$134,642	\$2,532,338	\$5,510,068	\$6,379,135	\$7,589,718	\$8,045,845	\$7,085,719
State	\$102,002	\$1,918,438	\$4,174,294	\$4,832,678	\$5,749,786	\$6,095,337	\$5,367,969
Smith County	\$8,160	\$153,475	\$333,944	\$386,614	\$459,983	\$487,627	\$429,438
City General Fund	\$16,320	\$306,950	\$667,887	\$773,228	\$919,966	\$975,254	\$858,875
City Half Cent Cap. Impnt Fund	\$8,160	\$153,475	\$333,944	\$386,614	\$459,983	\$487,627	\$429,438
<b>City Portion</b>	<b>\$24,480</b>	<b>\$460,425</b>	<b>\$1,001,831</b>	<b>\$1,159,843</b>	<b>\$1,379,949</b>	<b>\$1,462,881</b>	<b>\$1,288,313</b>
<b>Property Tax</b>	\$61,078	\$1,142,181	\$2,479,853	\$2,864,325	\$3,405,509	\$3,605,899	\$3,169,546
Smith County	\$9,511	\$177,854	\$386,149	\$446,017	\$530,287	\$561,491	\$493,544
ISDs (Average)	\$38,888	\$727,226	\$1,578,920	\$1,823,714	\$2,168,285	\$2,295,873	\$2,018,047
Tyler Junior College	\$5,762	\$107,753	\$233,948	\$270,219	\$321,274	\$340,178	\$299,013
<b>City of Tyler</b>	<b>\$6,917</b>	<b>\$129,348</b>	<b>\$280,836</b>	<b>\$324,376</b>	<b>\$385,663</b>	<b>\$408,357</b>	<b>\$358,941</b>
<b>City Revenue (Sales and Property Taxes)</b>	<b>\$31,397</b>	<b>\$589,774</b>	<b>\$1,282,666</b>	<b>\$1,484,219</b>	<b>\$1,765,612</b>	<b>\$1,871,238</b>	<b>\$1,647,254</b>
<b>Total Added City Revenue (Sales and Property Taxes) for Capital Investment and Residents' Spending, 7-Year Project</b>						<b>\$8,672,159</b>	

Note: Dollar figures are reported in 2018 U.S. dollars; amounts may not add up due to rounding.  
Source: *Hibbs Institute* for Business and Economic Research.

## Conclusions

The *Hibbs Institute* concludes that the overall economic benefits for the local economy from the planned Bellwood Forest Development are substantial. From the capital investments alone, total economic output or business volume in Smith County increases by more than \$907 million over the seven-year period of the project. Labor income (including proprietors’ income) receives more than \$300 million of that amount. A large number of jobs is generated or supported each year, peaking at 1,772 in year three. Over a thousand jobs are supported in three other years. Those job numbers decline as the capital investment portion of the project drops off, as is expected in construction scenarios. Some permanent jobs would likely be created from the economic activity resulting from that much investment, but the permanent number escapes accurate estimation.

The *Hibbs Institute* also calculated the economic impacts expected from the new consumption by future residents, and these impacts are also significant—and longer lasting. Smith County’s increased total business volume from Bellwood residents’ consumption impacts alone would grow

progressively from \$30 million in 2020 to more than \$157 million added by 2024, and total \$503 million added across the seven-year project. Some 1,258 jobs are also supported annually in 2024.

Remarkably, those added output and employment figures for 2024, when the buildings are finally filled, are expected to continue in future years because residents' consumption spending would likely remain relatively constant. That is, those 1,258 added jobs and \$157 million in added annual economic activity in 2024 would likely be sustained each year for a number of years.

Combining the two main parts of our analysis—capital outlay impacts and residents' spending impacts—the *Hibbs Institute* concludes that the Bellwood Forest Development project's total impact on Smith County would exceed \$1.4 billion during the seven years of Phase I. The total increase in labor income for Smith County would be \$495.1 million and an average of 1,515 jobs would be generated or supported during the seven-year construction period.

The estimated City of Tyler revenue from the Bellwood Forest Development project is also relevant. The *Hibbs Institute* estimates that Tyler would receive more than \$8.6 million from sales and property taxes (combined) over the seven-year life of the capital project. This number includes the considerable economic effects of ever-growing consumer spending as the complex fills over the last five years of the project.

If one were to extend the projection of tax collections beyond the seven years of construction to include the revenue effects of another five years of residential spending at the same rate as the effects in the last construction year 2024, which is a reasonable likelihood, the City of Tyler would collect an additional \$8.2 million in revenue. That addition of five years would bring the twelve-year total revenue increase for the City to \$16.9 million.

The *Hibbs Institute* is reasonably confident in these estimates, but is reluctant to make estimates for years further into the future.

## ***Hibbs Institute***

The ***Hibbs Institute for Business and Economic Research*** is a unit of the Soules College of Business at the University of Texas at Tyler. The ***Hibbs Institute*** is the primary business research organization serving the greater East Texas region. Its team of highly skilled, multidisciplinary professionals (1) collects and presents regional demographic, business and economic data, (2) provides expert analyses for companies considering locating or expanding in East Texas, and (3) carries out research studies for local governments, economic development entities and other clients in East Texas and beyond. Contact 903.566.7360 or [HibbsInstitute@uttyler.edu](mailto:HibbsInstitute@uttyler.edu) to ask about additional business services.

## ***Hibbs Institute Team***

### **Rod Mabry**

Dr. Mabry is Executive Director, *ad interim*, of the ***Hibbs Institute for Business and Economic Research***. He is also the Dr. Ben R. Fisch Professor of Economics and Finance in UT Tyler's Soules College of Business. Dr. Mabry retired in 2016 as the third president of The University of Texas at Tyler after 18+ years of service. His prior service included leadership roles in other universities, including Clemson University, University of Tulsa and University of Louisiana–Monroe, plus he worked as a researcher for the Brookings Institution in Washington, D.C.

Dr. Mabry earned a Ph.D. in economics from the University of North Carolina (specializing in public finance and state and local tax policy) and a B.S. in economics from the University of Kentucky. He also studied at the University of Edinburgh, Scotland, and Carnegie Mellon University.

Dr. Mabry has completed research on a variety of public policy issues—from judicial system costs and banking issues to state and local government tax and finance questions. He has co-authored an economics textbook and written more than forty articles that have appeared in numerous academic journals – such as the *Journal of Finance*, *Journal of Financial Research*, and *Commercial Investment Journal*. He has received research grants from such entities as the National Science Foundation, U. S. Department of Justice, Princeton's Woodrow Wilson School and state legislatures.

### **Manuel Reyes-Loya**

Dr. Reyes joined the ***Hibbs Institute*** in February 2018. As Senior Research Analyst, Manuel collaborates on the Institute's regional and economic impact modeling projects. Before joining the ***Hibbs Institute***, he worked for the Mexican Secretary of Economy, as well as several research centers including the Hunt Institute for Global Competitiveness at the University of Texas at El Paso, the Arrowhead Center at New Mexico State University, the Center for Economic Development and Research at the University of North Texas, and the Institute for Policy and Economic Development at the University of Texas at El Paso.

Dr. Reyes earned a Doctor of Economic Development, specializing in public finance, from New Mexico State University and an M.S. in Economics from the University of Texas at El Paso. He also earned a B.B.A. in International Business and an M.B.A. degree from the Tecnológico de Monterrey, Campus Chihuahua.

**Marilyn Young**

Dr. Young has an MBA and Ph.D. from the Sam M. Walton College of Business, The University of Arkansas. She is currently Professor of Management in the Soules College of Business, The University of Texas at Tyler. She also serves as a *Hibbs Institute* Research Fellow.

Dr. Young has been Director of the Small Business Institute at UT Tyler, sponsored by the U.S. Small Business Administration. She has published in many journals and conducted several economic development activities in the areas of labor market research and wage and benefit analysis for cities in Texas, including Tyler, Longview, Kilgore, Nacogdoches, Lufkin, Hillsboro, and Athens.

Dr. Young has completed numerous feasibility studies and conducted research for both profit and nonprofit organizations in evaluation of city services, including the need for a one-half cent sales tax. She represented the University in the Texas Higher Education Coordinating Board in analyzing higher education's role in meeting the needs of small business. She has analyzed types of assistance programs and whether universities are providing these services. Recently, she has conducted research in the area of family businesses and success factors, hidden unemployment, and underutilization of labor. She has published in many business journals, including the *Journal of Economics Education Resources*, *Journal of Applied Management and Entrepreneurship*, *Southern Journal of Business and Ethics*, and *Journal of Business and Entrepreneurship*.

**\*\*End *Hibbs Institute* Bellwood Report #2018-01, April 10, 2018\*\***