

EmPower TN: Selected Projects List 2015

Project	Description	Estimated Total Project Cost* (includes leveraged funds)	Estimated Annual Savings/ Estimated Simple Payback**	Grand Division
1. (a) R.S. Gass Complex - Environmental Assistance Center, Nashville, Davidson County, TN	Replace existing chiller and boiler, and lighting fixtures with LED light fixtures.	\$176,000	\$22,591 7.8 years	Middle
1. (b) R.S. Gass Complex - Environmental Assistance Center, Nashville, Davidson County, TN	Existing building commissioning for the HVAC system to optimize building control performance.	\$154,000	\$14,689 10.5 years	Middle
2. (a) Mid Cumberland Regional Health Office, Nashville, Davidson County, TN	Replace fluorescent lighting with controllable LED lighting and perform existing building commissioning to optimize building control and performance.	\$189,000	\$18,817 10 years	Middle
2. (b) Mid Cumberland Regional Health Office, Nashville, Davidson County, TN	Replace boiler with high efficiency equipment.	\$36,000	\$5,000 7.2 years	Middle
3. Tennessee Law Enforcement Training Academy, Nashville, Davidson County, TN	Replace fluorescent lighting with controllable LED lighting and perform existing building commissioning to optimize building control and performance.	\$272,000	\$44,800 6.1 years	Middle
4. South Central Regional Health, Columbia, Maury County, TN	Provide a Direct Digital Control replacement for the Building Automation System (BAS) and provide LED lighting controls.	\$140,000	\$20,100 6.9 years	Middle
5. 665 Mainstream Drive, Nashville, Davidson County, TN	Retro-commissioning on mechanical and lighting systems.	\$105,000	\$21,200 5 years	Middle

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6. Tennessee Bureau of Investigation , Memphis, Shelby County, TN	Retro-commissioning services for heating, ventilation and cooling and lighting systems.	\$56,000	\$12,000 4.7 years	West
7. Rachel Jackson Office Building , Nashville, Davidson County, TN	Replace valves on chiller system with digital controls and incorporate into automation system.	\$60,000	\$8,300 7.2 years	Middle
8. TDEC – TN State Parks , Multiple State Park Locations	Exterior Lighting conversion to LED Wall Packs.	\$383,600	\$18,615 14.6 years	All
9. Andrew Jackson Office Building , Nashville, Davidson County, TN	Heat loss recovery, retro-commissioning, lighting controls.	\$1,335,000	\$414,756 3.2 years	Middle
10. Andrew Jackson Office Building , Nashville, Davidson County, TN	Replace energy valves.	\$169,000	\$16,200 10.4 years	Middle
11. Lowell Thomas , Jackson, Madison County, TN	Retro-commissioning.	\$728,000	\$135,971 5.4 years	West
12. Lowell Thomas , Jackson, Madison County, TN	HVAC.	\$175,000	\$36,275 4.8 years	West
13. Lois M. DeBerry Special Needs Facility , Nashville, Davidson County, TN	LED Lighting improvements and plumbing fixtures.	\$5,082,000	\$486,767 9.4 years	Middle
14. Porter Lab – Ellington Agricultural Center , Nashville, Davidson County, TN	Boiler replacement, retro-commissioning, and main system upgrade.	\$1,161,000	\$123,847 9.4 years	Middle
15. James K. Polk Bldg. , Nashville, Davidson County, TN	Fault Detection and Diagnostics, retro-commissioning/energy valve replacement, supplemental chilled water piping.	\$566,000	\$177,410 3.2 years	Middle

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16. TBI Headquarters , Nashville, Davidson County, TN	Continuous building commissioning, boiler efficiency improvements, LED lighting and solar thermal hot water supply.	\$2,818,000	\$457,239 5.7 years	Middle
17. R.S Gass Lab , Nashville, Davidson County, TN	Retro-commissioning and LED lighting.	\$718,000	\$129,559 5.5 years	Middle
18. WRS TN Tower , Nashville, Davidson County, TN	LED lighting retrofit.	\$4,144,000	\$403,167 10.3 years	Middle
19. Riverbend Maximum Security Institution , Nashville, Davidson County, TN	LED Lighting Improvements.	\$2,525,000	\$241,033 9.4 years	Middle
20. Turney Center Industrial Complex , Only, Hickman County, TN	LED Lighting Improvements.	\$2,833,000	\$172,961 14.7 years	Middle
21. Tennessee Prison for Women , Nashville, Davidson County, TN	LED Lighting Improvements.	\$930,000	\$81,306 10.3 years	Middle
22. West Tennessee Regional Health , Jackson, Madison County, TN	DDC Controls and LED Lighting.	\$379,000	\$61,280 6.2 years	West
23. East Tennessee Regional Health , Knoxville, Knox County, TN	Chiller replacement/retro-commissioning/LED lighting.	\$326,000	\$77,003 4.2 years	East
24. Davy Crockett Office Building , Nashville, Davidson County, TN	Heat exchanger replacement.	\$747,000	\$79,990 5.6 years	Middle
25. Andrew Johnson Office Building , Nashville, Davidson County, TN	Replace boilers, replace cooling towers, install heat exchanger for outside cooling, all with new controls. Perform retro commissioning to optimize performance of all systems.	\$697,000	\$65,211 6.1 years	Middle

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26. TN Fire Service & Codes Enforcement Academy , Bell Buckle, Bedford County, TN	Campus lighting improvements.	\$323,893	\$58,744 5.5 years	Middle
27. John Sevier Building , Nashville, Davidson County, TN	Chilled water valve upgrades, Variable Frequency Drive for air supply fans, cooling coil controls.	\$150,000	\$14,300 10.5 years	Middle
28. TBI Knoxville , Knoxville, Knox County, TN	Retro-commissioning, boilers.	\$362,000	\$91,102 4 years	East
29. Chattanooga State Community College , Chattanooga, Hamilton County, TN	Omni Plex Lighting, mechanical and envelope upgrade.	\$599,000	\$58,538 9.5 years	East
30. Northeast State Community College , Blountville, Sullivan County, TN	Campus lighting upgrades.	\$597,500	\$98,180 4.8 years	East
31. University of Tennessee at Martin , Martin, Weakley County, TN	Lighting upgrade at Gooch Hall.	\$565,650	\$65,314 8.7 years	West
32. University of Tennessee at Chattanooga , Chattanooga, Hamilton County, TN	Energy Management Control System, HVAC load reduction.	\$475,000	\$33,000 6.2 years	East
33. University of Tennessee at Chattanooga , Chattanooga, Hamilton County, TN	Campus lighting improvements.	\$7,059,000	\$669,402 9.2 years	East
Total		*\$37,036,643		

**Estimated Total Project Costs* represents \$33,620,371.70 in requested EmPower TN funds, plus leveraged funds (non-EmPower TN funds). Leveraged funds will be used to cover project-related costs such as design fees, administrative costs, or labor for certain projects.

***Estimated Annual Savings* represents utility costs avoided in one year. *Estimated Simple Payback* represents the number of years required to recover the initial investment.

Note: The total FY 2015-16 EmPower TN appropriated funding is about \$43.7million of which \$37,500,000 is budgeted for state efficiency projects. Remaining efficiency project funds will be used for additional opportunities from current or yet to be identified projects this fiscal year. Approximately \$6.2 million of the \$43.7 million appropriated funding is for acquisition and implementation of a statewide energy management data system to manage the state's 7,000-plus monthly utility bills and identify future priority efficiency opportunities.