

STP/SNK Transit Projects

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| Project Name | Replacement of Four (4) Diesel Buses with Hybrid-Electric Buses |
| Applicant Name | Transit Authority of Northern Kentucky |
| Applicant Title | |
| Email | fbusofsky@tankbus.org |
| Address | 3375 Madison Pike, Ft. Wright, KY 41017 |
| Contact Name | Frank Busofsky, Manager of Planning |
| Phone | 859-814-2148 |
| Project Information | <p>TANK is requesting federal funds to assist with the purchase of four (4) full-size, hybrid-electric fixed route replacement buses. These buses would be 40-foot, low-floor buses equipped with bike racks, security cameras and wheel chair lifts. As part of TANK's bus replacement program, the new buses would replace four (4) 40-foot, diesel-powered low-floor buses that will exceed their federally defined useful life.</p> <p>TANK has a current fleet of 102 fixed route buses. TANK replaces nine (9) buses per year on average to maintain a safe, reliable fleet, and to comply with the FTA guidelines. TANK's annual 5307 formula allocation alone does not cover the cost of the entire annual nine vehicle replacement. Using 100% of those funds for bus replacement prevents TANK from making other necessary capital improvements.</p> |
| Upload Project Location Map | |

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| design FY | |
| designrequestedfunds | |
| designlocalmatch | |
| Total Design Estimate | #{CALC:DESIGNTOTAL} |
| Design Local Match | {CALC:DESIGNPERCENT}% |
| PE-Row Services FY | |
| perequestedfunds | |
| pematch | |
| PE total Cost | \$0.00 |
| PE Local Match | 0% |
| Right-of-Way FY | |
| rowrequested | |
| row match | |
| Row Total Cost | \$0.00 |
| Row Local Match % | 0% |
| Utilities FY | |
| utilitiesrequested | |
| Utilities Local Match | |
| Utilities Total Cost | \$0.00 |

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| Utilities Match % | 0% |
| Construction FY | |
| constructionrequested | 1990176 |
| constructionmatch | 497544 |
| Construction Total Cost | 2,487,720.00 |
| Construction Match % | 20.00% |
| Requested Funds Total All | \$1,990,176.00 |
| All Requested Match | \$497,544.00 |
| All Projects Total Estimate | \$2,487,720.00 |
| Total Local Match % All | 20.00% |
| Bike FY | |
| bikerequested | |
| bikematch | |
| Bike Total Estimate | 0.00 |
| Add KYTC "State Forces" oversight charge of 10% of design cost or minimum \$5000 to total design amount. Attach a certified cost estimate. | |

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| An adopted ADA Transition Plan is in place for our jurisdiction. | no |
| Date of Adoption, if applicable | |
| An adopted Title VI Plan is in place. | yes |
| Date of Adoption, if applicable Copy | October 11, 2017 |
| I understand that non-federal match is required as a condition of receiving federal funds and hereby pledge those funds for this project. | yes |
| I understand that as the applicant, I am responsible for providing funds for cost overruns. If additional federal funds are received our jurisdiction will provide non-federal funds as match. | yes |
| I understand that if we accept federal funds and cancel or delay the project that future applications to OKI may be subject to penalty as described in the application. | yes |
| I understand that as a condition of receiving federal funds, I hereby pledge to maintain the federal investment in a reasonable and prudent manner through its useful life. | yes |
| Name | Frank Busofsky |
| Title | Manager of Planning |

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| Organization | Transit Authority of Northern Kentucky |
| Date | 5/7/2018 |
| What is the Type of Project | Replacement or expansion of revenue vehicles |
| What is the anticipated impact on ridership from this project? | Low increase in ridership |
| Please Explain: | <p>In adherence of TANK's Fleet Management Plan, replacing 9-10 older buses annually has a myriad of downstream impacts that encourage an increase in ridership. New transit vehicles provide a clean, modern space for our riders. Vehicle appearance is the first impression our passengers have our entire system, and can be major influence of perception. Even for non-riders, whose only interactions with our service is via on-street visibility, seeing a sleek, fuel-efficient bus is representative of a well-run organization; an organization who is utilizing tax dollars in a productive manner.</p> <p>As part of TANK's new bus contract, our new fleet will be moving away from cloth seats and interior, which can trap bacteria and show wear-and-tear easier than plastic seats can. Additionally, they reduce time spent on cleaning the vehicles, allowing our Maintenance department to better allocate their resources. Updating our vehicles through asset management planning decreases the number of maintenance road-calls (break downs), thus improving our system-wide on-time-performance. According to our Customer Complaint Software, late buses are the biggest complaint category at TANK. With traffic congestion and accidents out of our control, ensuring that our buses are in top-notch mechanical condition is one of the few ways to directly respond to those passenger issues.</p> |
| What is the project impact on safety and security? | High |

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| <p>Please Explain:</p> | <p>Replacing four buses that exceeded their federally defined useful lifespan will significantly improve travel safety. The new buses would have improved safety features including new restraint systems, LED lights, and annunciation systems. These features and more will make travel safer for individuals inside and outside of the bus. Additionally, the new buses will be equipped with bicycle racks to link multiple-modes trips, and new low-floor wheelchair ramps to improve access for individuals with disabilities. With our updated bus contract effective April 2018, all new purchases will also include LED turning lights, which warn/flash on the sidewalk when the bus is making a turn. This will dramatically improve pedestrian safety in parts of service area with limited lighting and/or sidewalks.</p> <p>TANK has security cameras that monitor activities both inside and outside the buses. In order to increase travel security, the replacement buses will be equipped with a Seon Digital video Recording System and additional three (3) cameras, compared to the buses to be replaced.</p> |
| <p>What is the time to implementation after funding is granted?</p> | <p>0 to</p> |
| <p>What is the system impact of the project?</p> | <p>Impact on system & passengers</p> |
| <p>Please Explain:</p> | <p>The new buses would greatly improve the passenger experience and passenger safety. The bus system benefits from greater fuel efficiency, less maintenance time/cost, improved surveillance, and greater reliability of service.</p> |
| <p>What is the condition of existing transit agency assets to be upgraded or replaced?</p> | <p>Fair</p> |
| <p>Please Explain:</p> | <p>Four (4) of the replaced buses will be 13 years old with an average of 525,000 driven miles.</p> |

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| <p>Will your project have any impact(s) on any of the following OKI identified Environmental Justice groups? Check all that apply.</p> | <p>minority, zero-car-household, Low-income, Disabled, elderly</p> |
| <p>Describe any direct or indirect permanent benefits of your project on the identified EJ groups?</p> | <p>TANK does not designate specific buses to certain routes. Most buses are circulated through our system based on the needs of our dispatching process, not based on the neighborhood or area of operation. Therefore, the direct benefits of new, safer, more reliable buses will be provided to all five EJ communities. Investing in transit is a direct investment in the lives of many disabled, elderly, minority, low-income, and zero-car households. Indirectly (by maintaining an efficient fleet and fully-funded bus replacement program) TANK is more able to meet long-range service improvement goals that would benefit all TANK passengers.</p> |
| <p>During the implementation phase, will the project have a temporary or permanent negative impact on any of the OKI identified EJ groups listed above? If yes, please describe the impact and how it will be mitigated:</p> | <p>There will be no temporary negative impact on any of the above-noted EJ groups. Transit service is an asset to the OKI identified EJ groups listed above and maintaining a reliable vehicle fleet ensures that these groups continue to have access to public transportation.</p> |
| <p>Will the completed project have a negative impact on any of the OKI identified EJ groups? If yes, please describe the permanent negative impact(s) and how it will be mitigated:</p> | <p>There will be no negative impact or burden on any of the OKI-identified EJ groups. TANK dispatches vehicles in our fleet between all routes regardless of route location or presence of EJ groups.</p> |
| <p>Please outline your communication plan with any of the OKI identified EJ groups related to the project. (i.e. public meetings, bilingual information, develop community liaisons):</p> | <p>TANK has not identified any potential negative impact to any EJ community that would result from the replacement of buses. If any negative impacts are identified, TANK would work with OKI and the affected community to resolve and/or mitigate those impacts.</p> |

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| <p>Employment, Employment Bonus and Investment Bonus: How does the project provide economic vitality in the project area?</p> | <p>TANK is a significant economic development ally as it connects the region's workforce to NKY employers. 75% of TANK passengers are traveling to and from work and another 10% are traveling to their education destination. In 2015, TANK partnered with Cincinnati's Metro, and other local organizations to create the Transit Friendly Destinations program, which encourages sustainable transportation habits and recognizes the entities that promote transit ridership. Within the Greater Cincinnati Regional transit system, TANK has been a fully interconnected partner as nearly every TANK route connects to the other regional transit providers in downtown Cincinnati, Ohio. This offers NKY employers access to the major metropolitan labor market of Greater Cincinnati.</p> |
| <p>Air Quality/Energy: Will the project reduce Vehicle Miles Traveled (VMT), Vehicle Hours Traveled (VHT) or both?</p> | |
| <p>Please explain:</p> | <p>In general public transportation helps reduce vehicle miles and hours traveled; however since this is a replacement project, rather than service expansion, there is not likely to be significant additional reduction in VMT or VHT related specifically to this project. By replacing four diesel buses with four hybrid buses, TANK would expand its hybrid bus fleet and significantly reduce its Greenhouse Gas (GHG) footprint. Hybrid-electric vehicles are powered by a battery-powered electric motor that provides most of the vehicles power at slower speeds. A smaller clean diesel engine takes over only when the bus reaches higher speeds. Additionally, the four diesel buses to be replaced will be 12-15 years old at the time of replacement (2020). Therefore, TANK will benefit from technological advancements over the past decade, which further reduce GHG emissions and improve fuel economy. Replacing aged and unreliable vehicles benefits the community and TANK's passengers by reducing road calls and improving schedule adherence. New attractive vehicles and better on-time performance make the TANK service more appealing to commuters and encourage more people to ride TANK. This, in turn, has the potential to reduce VMT of single-occupied vehicles.</p> |

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| Does this project create new or enhance existing intermodal connections? | no |
| If yes, please describe: | <p>All TANK buses are equipped with bicycle racks and low-floor wheelchair ramps, and the new buses are no exception. Moreover, TANK has multiple Park&Ride facilities, connecting the single-occupied vehicle mode to transit. Therefore, while the current project does not necessarily enhance intermodal connections, it helps TANK to sustain those links and to continue developing a balance transportation system for the residents of Northern Kentucky and the Greater Cincinnati Region.</p> |
| % replacement | 100 |
| % expansion | |
| Please Explain | This project is solely for the replacement of four, older diesel-powered buses. |
| Please indicate all that apply | <p>is-the-project-located-along-a-functionally-classified-major-collector-or-higher-roadway-with-urban-development-characteristics, Is the project located in an area that is experiencing strong growth pressures and expected and/or planned to develop into a mixed use/multi modal center?, is-the-project-located-in-an-area-with-a-mix-of-uses-with-a-central-focus, is-the-project-located-in-a-town-neighborhood-center-or-downtown-area</p> |
| Explain: | Due to the nature of this project, TANK's entire service area will be affected. Modernizing the fleet is an essential mechanism to operate more efficiently, both fiscally and environmentally. |
| Will this project serve brownfield or greyfield properties, or areas where infrastructure is underutilized? | yes |

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| <p>Explain:</p> | <p>TANK's fixed-route vehicles service many communities throughout Northern Kentucky, including brownfield and greyfield properties, and areas where infrastructure is underutilized. Studies show that the availability of public transportation at these locations is a significant factor that encourages their rehabilitation.</p> |
| <p>Are efforts to avoid, minimize or offset/compensate for environmental impacts planned as part of this project (e.g. wetlands, forests, streams, noise)?</p> | <p>no</p> |
| <p>Explain:</p> | <p>This project will not create any negative environmental impacts.</p> |
| <p>Are green infrastructure strategies planned as part of this project (e.g. contiguous corridors to reduce habitat fragmentation, innovative stormwater runoff techniques)?</p> | <p>no</p> |
| <p>Explain:</p> | <p>This project is about bus replacement and does not include provisions for green infrastructure. However, the new vehicles will benefit from hybrid-electric technological advancements over the past decade which reduce emissions and improve fuel economy. Each bus ordered by TANK is now specified to contain a mini-hybrid thermal management system and a fully electric fan cooling system. They are cleaner, quieter and more energy efficient than the vehicles to be replaces.</p> |
| <p>Does this project abut or directly impact any potentially sensitive environmental resources (as identified in state conservation plans, maps or inventories)?</p> | <p>no</p> |
| <p>Explain:</p> | <p>This project will not directly impact any potentially sensitive environmental resources.</p> |

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| Comprehensive Plan (or other): Is the project consistent with the jurisdiction's comprehensive plan? | yes |
| Title of Plan: | TANK Transit Network Study |
| Date Adopted: | January 8, 2014 |
| Contact Person: | Frank Busofsky |
| Page Number(s) where project is identified and/or referenced: | Please refer to the 2013 Network Study Plan Summary (Appendix D) |
| Planning Area: Please identify the planning area (location) in relation to the proposed transportation project. | The Planning area for the TANK Transit Network Study was identified as the 3 Northern Kentucky Counties (Boone, Kenton & Campbell) as well as the portion of Hamilton County served by TANK (downtown Cincinnati). |

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| <p>Public Participation: Generally describe the public participation process for the plan (Include page references to specific examples, where applicable).</p> | <p>The 2013 Network Study Public Participation Plan consisted of several components:</p> <ul style="list-style-type: none"> i,§ TANK held five public meetings to discuss the study draft recommendation and to collect public feedback. Four of the meetings were held at major bus stops during peak-transportation times, and one meeting was held at the N. Kentucky Conventions Center. ii,§ TANK established an online survey, where patrons could access, and provide written feedback on, the study draft recommendations. iii,§ TANK posted a summary of the draft recommendations on its buses and solicited for feedback through telephone, mail, and email. iv,§ An advisory team was created for the Transit Network Study that included officials and representatives from local governments, universities, planning commissions and other community stakeholders who are served by TANK's transit service. The Advisory Team met several times during the study, provided guidance and feedback during the plan drafting. |
| <p>Core Contents: Generally describe the contents of the applicable plan related to the following elements: transportation, land use, economic development, public facilities, housing, natural resources, recreation, intergovernmental coordination and capital improvements. For example, are each of these elements included in the plan? Was appropriate inventory and analysis completed for these elements? Were goals objectives and policies set for these elements? If not, why not (e.g., resource limitations, characteristics of the jurisdictions)?</p> | <p>The 2013 Transit Network Study identified the existing conditions of TANK's transit system and the socio-economic characteristics of the TANK service area. The study identified strategic capital and operational investments that could be made to improve the service to the Northern Kentucky Community while increasing the system efficiency. The plan's output includes a list of capital projects and service improvements, both for the short and the long terms. The recommendations account for multiple factors such as the existing and planned transportation network, expected economic growth, alternative transportation modes, major destinations (trip generators and attractions), land use, population density, demographics and more.</p> |

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| <p>Land Use/Transportation Relationship: Generally describe the relationship between land use and the proposed transportation project as set forth in the plan? For example, is new development in the area creating need for the project? Is new development planned for/expected that the project will serve? (Include page references to specific examples).</p> | <p>The Transit Network Study provides no land policy statements beyond recommending specific property acquisitions and capital projects related to transit hubs and bus stop improvements. However, the study acknowledges that there is a link between land use and transportation. For example, the plan acknowledges the challenges in providing efficient service between suburban communities in Northern Kentucky. It proposes several new Park & Ride locations, and a new suburban cross-county route to facilitate quicker transit trips between suburban residences and employers.</p> |
| <p>Local Match: How much additional local match is being provided OVER the required match?</p> | <p>0</p> |
| <p>Project Delivery History: Has the applicant had any programmed projects miss their originally programmed date?</p> | <p>no</p> |
| <p>Specify projects: (see application instructions for negative points associated with this factor)</p> | |

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| <p>Technology: Describe elements of your project that encourage the implementation of new technologies, automation, advance materials, etc, in transportation.</p> | <p>Our new bus contract outlines a number of technological advancements over the diesel-powered buses that will be replaced. The largest component that will see an upgrade is the fuel technology, by purchasing hybrid-electric buses and retiring diesel buses. These advancements are most evident in the urbanized area of Northern Kentucky (where the majority of our service exists), as the buses will be almost exclusively battery-powered due to the slower travel speeds.</p> <p>On the security side, the new buses will feature a Seon Digital video recording system, and three (3) additional cameras compared to the old buses. Another new feature that the buses will be equipped with are the LED turning lights. These lights are activated when the bus makes a turn at an intersection, and illuminate the area on the sidewalk. This benefits both the driver, by mitigating any blind spot issues, and the pedestrian, by providing additional warning of the bus' turn.</p> <p>The new buses will come pre-wired for CAD/AVL which enables computer-aided dispatch. This allows for the buses location to be identified via real-time bus tracking. As of January 2018, TANK became the first transit system in Cincinnati to integrate real-time information with Google Maps, the most popular web mapping app in the world. Ensuring that our upgraded fleet is equipped with the newest GPS technology is imperative to providing accurate data to both our Dispatch center and our passengers. Additionally, the buses are wired for Automated Passenger Counters, which help provide stop-level ridership information that feeds the service planning and scheduling processes.</p> |
| <p>Supplemental Information Provided by the Applicant Insert Links or supplemental information as appropriate (maximum 5 pages please)</p> | <p>http://funding.oki.org/wp-content/uploads/ninja-forms/5/A_Aiello_Support_Letter.pdf, http://funding.oki.org/wp-content/uploads/ninja-forms/5/B_Boone_Co_Support_Letter.pdf, http://funding.oki.org/wp-content/uploads/ninja-forms/5/C_Campbell_Co_Support_Letter.pdf, http://funding.oki.org/wp-content/uploads/ninja-forms/5/D_Kenton_Co_Support_Letter.pdf, http://funding.oki.org/wp-content/uploads/ninja-forms/5/E_TNS_Plan_Summary.pdf</p> |