

TRANSIT LIVABILITY PERFORMANCE MEASURES

AGENCY: Federal Transit Administration (FTA), DOT

ACTION: Notice for Request for Applications (RFA)

SUMMARY: Building more “livable” communities has been identified as an objective of the US Department of Transportation. Recognizing this, the Federal Transit Administration (FTA) plans to develop measures of how well transit systems meet the needs of people in the communities they serve. Such metrics are required for evaluating the success of livability enhancement programs, and for identifying where these programs are needed. The objective of this project is to define national livability performance measures and to develop the data resources to be able to calculate these measures on an annual basis so as to track trends and progress. The scope of this effort includes both urban and rural areas with specific direction towards measures that will allow FTA to gauge the effectiveness of Federal transit livability efforts.

DATES: An applicant must submit a proposal electronically to <http://www.grants.gov> by November 30, 2010 for consideration. All potential applicants are advised to begin the <http://www.grants.gov> registration process immediately, if they have not previously submitted Federal assistance applications through <http://www.grants.gov>, in order to be able to meet the deadline. FTA expects to award funds through Cooperative Agreements in the month of December. In the event of a system problem or technical difficulty with the application submittal, the applicants should contact the FTA Project Manager for delivery instructions.

ADDRESSES: The website <http://www.grants.gov> allows applicant organizations to electronically find and apply for competitive opportunities from all Federal agencies that award Federal assistance. This website is the single access point for over 1000 Federal assistance programs administered by 26 Federal agencies.

FOR FURTHER INFORMATION CONTACT: Technical, program management and administrative questions should be directed to Keith Gates, Office of Budget & Policy (TBP-10), Room E52-329, Federal Transit Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, D.C. 20590; email address: keith.gates@dot.gov , or by phone at 202-366-1794.

SUPPLEMENTARY INFORMATION:

BACKGROUND:

Building more “livable” communities is an objective of the US Department of Transportation. Recognizing this, the Federal Transit Administration (FTA) plans to develop measures of how well transit systems meet the needs of people in the communities they serve. Such metrics are required for evaluating the success of livability enhancement programs, and for identifying where these programs are needed. Beyond this, the process of defining quantitative measures of abstract concepts, like livability, contributes to the understanding of objectives and builds a common vocabulary by which they can be discussed.

The US DOT, Environmental Protection Agency (EPA) and Department of Housing and Urban Development (HUD) have established a Partnership for Sustainable Communities which promotes the following six goals to promote more livable communities:

1. *Provide more transportation choices.*
Develop safe, reliable and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions and promote public health.
2. *Promote equitable, affordable housing.*
Expand location- and energy-efficient housing choices for people of all ages, incomes, races and ethnicities to increase mobility and lower the combined cost of housing and transportation.
3. *Enhance economic competitiveness.*
Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers as well as expanded business access to markets.
4. *Support existing communities.*
Target federal funding toward existing communities through such strategies as transit-oriented, mixed-use development and land recycling to increase community revitalization, improve the efficiency of public works investments, and safeguard rural landscapes.
5. *Coordinate policies and leverage investment.*
Align federal policies and funding to remove barriers to collaboration, leverage funding and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.
6. *Value communities and neighborhoods.*
Enhance the unique characteristics of all communities by investing in healthy, safe and walkable neighborhoods rural, urban or suburban.

The US DOT released a Draft Strategic Plan for 2010-2015 for comment in early 2010:
http://www.dot.gov/stratplan/dot_strategic_plan_10-15.pdf

This plan, although not final, identifies livability as a strategic objective of the department. It provides a table of "livable communities outcomes and proposed performance measures." The FTA section of which is reproduced below. The proposed measures were based on available data and analysis capabilities at that time. One of the goals of this project is to develop better data and a more sophisticated set of measures by which the DOT can evaluate the success of its programs.

Additional discussion of Livability issues can be found in TCRP Report 22, *The Role of Transit in Creating Livable Metropolitan Communities*:
http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_22-a.pdf
and at the Reconnecting America web site: <http://www.reconnectingamerica.org>.

Livable Communities Outcomes and Proposed FTA Performance Measures

OUTCOMES	PERFORMANCE MEASURES
Increased access to convenient and affordable transportation choices	<ul style="list-style-type: none"> - Transit Ridership - Average percent change in transit boardings per transit market (150 largest transit agencies). - Increase in transit trips in non-urbanized areas. - Increase in transit seat-miles by urbanized area transit systems.
Improved public transit experience	<ul style="list-style-type: none"> - Increase transit vehicle reliability.
Improved access to transportation for special needs populations and individuals with disabilities.	<ul style="list-style-type: none"> - Percent of bus fleets compliant with The Americans with Disabilities Act. - Percent of key rail stations compliant with the ADA.

OBJECTIVE

The objective of these projects is to identify performance measures for how well transit contributes to the livability of a community and to develop the data resources to be able to calculate these measures on an annual basis so as to track trends and progress. The scope of this effort includes both urban and rural areas with specific direction towards measures that will allow FTA to gauge the effectiveness of Federal transit livability efforts.

FTA is looking for metrics that are general enough to be applied nationally and that do not require a large ongoing funding commitment for collecting data. The classic measures of transportation system performance, Accessibility and Mobility, have been defined and measured in many ways, usually in the data-rich context of academic planning exercises. They often include factors that are outside the scope of how FTA can influence a community so FTA is seeking to define more practical and relevant metrics for its own use. (FTA largely influences the provision of local transit service by providing capital funding for agencies to maintain and expand transit systems. It does not usually get involved with operational decisions, such as defining transit routes and service levels.)

For example, if one assumes that most transit agencies have successfully planned their routes so that they take people where they want to go; then a suitable metric could be based on determining what part of a population has access to these transit routes. This measure is often called Availability and could be adapted to the purposes of this project. Or, if one questions the assumption that accessing transit is sufficient, one could consider whether the extent of a community's transit system supports necessary levels of mobility.

Another approach might be to develop an index of transit effectiveness that considers several of the factors described by the Partnership for Sustainable Communities.

FTA's intent is to encourage the exploration of a range of potential measures, not to prescribe any one approach as the focus of this investigation. To be useful, however, the resulting measures should help FTA identify where there are deficiencies in the level of transit service and address them through allocation of capital resources.

FTA experts have suggested some other potential areas of investigation:

- The "access-shed" of a system for walkers, bikers, etc. This is not only distance, but potentially urban form as well,
- The frequency of service, and the relative importance of peak service versus standard regularly spaced service, and
- Is a network comprehensive enough to support the 'livability' of a community? (Baltimore's transit network compared to DCs).

Innovative approaches are encouraged but practical application is the objective.

The natural platform for spatial analysis of this kind is a Geographic Information System (GIS). These applications allow data to be evaluated as a series of map overlays to support sophisticated analysis and graphic capabilities. GIS is a common tool in the planning profession. Wherever possible, measures developed for this project should be compatible with existing planning tools and methods. Leveraging these tools, and their data formats will reduce the cost of collecting, maintaining, and evaluating the data.

Several university and non-profit research organizations have collected data on transit routes and performed analysis of this type on a one-time basis to support research activities. FTA proposes to engage them in a coordinated set of investigations to perform research in three related areas and then integrate the results into a livability assessment system suitable for application on a national scale to support FTA measurement needs.

FTA seeks proposals for research in these three separate, but related, areas:

1) Data Needed to Support Livability Performance Measures

FTA needs to develop an affordable and consistent source of national data on where transit service exists to support calculation of livability metrics. This data will need to be updated on an annual basis to support performance reporting. FTA's National Transit Database is not currently suitable for collecting this type of data and FTA is seeking ideas for an approach that can leverage how agencies are already making this data available to the public.

Data on the location of bus stops and rail stations, as well as schedule information, is increasingly available in an open source public format from Google called the General Transit Feed Specification (GTFS). Many transit agencies are submitting data to Google so that their customers can use Google Maps to access information on their services. For some agencies it is already possible to download this data, in GTFS format, for GIS analysis. Procedures for building a comprehensive database using this data need to be

developed. Data strategies for rural areas and areas not covered in Google Maps will need to be found to support analysis over the entire nation.

It will also be necessary to consider practices for archiving data to capture “snapshots” of where the country is each year to facilitate time series analysis. The data may also need to be supplemented with various layers of demographic and geographic data so as to give FTA the ability to explore livability issues using spatial and temporal analysis to identify trends and data anomalies. Recommendations for addressing these long-term implementation issues should be developed as part of the investigation.

As a final product of this effort, Database applications should be demonstrated across a geographic region selected for data availability and for a variety of urbanized areas.

2) Urban Livability Performance Measures Suitable for Use at a National Level

As discussed above, FTA needs a set of metrics that characterizes how transit systems contribute to the quality of life in the communities they serve. These metrics need to make sense from a national perspective but also be compatible with regional and local planning efforts. This work will expand on previous work at local and regional levels to explore measures that could meet Federal needs. The work should result in a set of practical recommendations for implementation by FTA.

Candidate measures shall be evaluated across a geographic region selected for data availability and for the variety of its urban environments. This evaluation should be included as a final product of this effort. This requirement is intended to demonstrate applicability at the national level.

Proposals for this task will need to show that the principals have significant experience studying livability issues that are related to the provision of transit service and that they have the resources needed to perform the proposed work. Where possible, experts with experience from several regions of the country should be included.

3) Rural Livability Performance Measures Suitable for Use at a National Level

Livability issues are not confined to urban areas. FTA wants to understand the transportation needs of rural communities as well as urban ones. Thus, a set of metrics that can characterize how rural transit systems contribute to the quality of life in the communities they serve is also needed. This project should include the needs of the aging and disabled rural population. These metrics must make sense from a national perspective but also be compatible with regional and local planning efforts. FTA is looking for proposals to explore various metrics in an academic environment that allows innovative ideas to be tested with community planners and transit practitioners included in the evaluation process.

Candidate measures shall be evaluated across a geographic region selected for data availability and for the variety of its rural environments. This evaluation should be included as a final product of this effort. This requirement is intended to demonstrate applicability at the national level.

Proposals for this task will need to demonstrate that the principals have significant experience studying livability issues that are related to rural transportation.

Requirements for all Proposals

Term of proposed projects is to be 18 months from start of agreement.

Any college, university, or non-profit organization may apply.

An applicant may apply for any or all of the three areas. Separate proposals must be submitted for each area.

Proposals may include use of Federal, State, or other research funds for additional work as part of the overall project, or to continue the project past the 18 month final presentation.

All proposals should include travel funds to meet with FTA staff in Washington, DC, for:

- An initial meeting to discuss goals,
- A half-way progress report, and
- A final presentation to discuss results.

AWARD INFORMATION

FTA will fund three projects under this program, one in each of the subject areas. Funding for each cooperative agreement under this program will range from \$50,000 to \$125,000. The total available funding is \$300,000. Future funding will depend on appropriations. FTA will participate by attending review meetings, commenting on technical reports, maintaining frequent contact with the project manager and approving key decisions and activities, including redirecting activities if needed.

COST SHARING OR MATCHING

Federal transit funds are available to research projects at up to 100 percent of the project cost. However, cost sharing will be an evaluation criterion.

ELIGIBILITY INFORMATION

Eligible recipients include colleges, universities and non-profit organizations.

PROPOSAL CONTENT

This announcement includes all of the information that you need to apply.

An SF 424 form, available in grants.gov, is required. It is largely self explanatory.

You must submit a pre-application (not more than 15 pages in length) as outlined in Chapter II (Item 9.b) of FTA Circular 6100.C: Transit Research and Technology Programs: Application Instructions and Program Management Guidelines.

http://www.fta.dot.gov/laws/circulars/leg_reg_4121.html

This pre-application should address the criteria laid out below in the Application Review Information section. The project budget justification should include identification of any matching funds and their source. The Formal Application described in the Circular is not

being requested at this time. The application should attach information on the qualifications of key personnel, including biographies.

All potential applicants are advised to begin the <http://www.grants.gov> registration process immediately, if they have not previously submitted Federal assistance applications through <http://www.grants.gov/>, in order to be able to meet the deadline.

APPLICATION REVIEW INFORMATION

A review panel will be convened to review each proposal. Project proposals will be evaluated based on the following criteria:

1. Proposed Research, which includes the applicability of the proposed research to the requirements, the uniqueness of the research approach, and the expected results. The proposal will also be judged based on its stated strategy for exploring a wide range of metrics and narrowing the possibilities down to a limited set of practical measures for presentation to FTA. This includes the approach for regional demonstration of the measurements. The quality of proposed strategies for presenting the information in a manner that maximizes its usefulness as a tool for Federal decision-makers will also be considered.
2. Qualifications of Key Personnel, which includes knowledge of and prior experience with transit-related livability research, urban planning issues, and transit data resources.
3. Technical Management Plan, which includes the management approach for planning, scheduling, administering, coordinating and conducting the work effort.
4. Past Performance on activities relevant to the proposed work.
5. Cost and Cost Sharing.

AWARD ADMINISTRATION INFORMATION

The notification date for successful applications is expected to be during the month of December 2010. Following receipt of the notification letters, the successful entities will be required to submit the Formal Application as outlined in Chapter II (Items 10-25) of FTA Circular 6100.1C: Transit Research and Technology Programs: Application Instructions and Program Management Guidelines http://www.fta.dot.gov/laws/circulars/leg_reg_4121.html through the FTA Transportation Electronic Award Management (TEAM) system website. FTA will manage the cooperative agreement through the TEAM system. Before FTA may award Federal financial assistance through a Federal grant or cooperative agreement, the entity must submit all certifications and assurances pertaining to itself and its project as required by Federal laws and regulations. FTA has consolidated the various certifications and assurances that may be required of its awardees and the projects into a single document published in the Federal Register. Annual List of Certifications and Assurances for FTA Grants and Cooperative Agreements and guidelines are published in the Federal Register and posted on the FTA Web site at: http://www.fta.dot.gov/funding/grants_financing_93.html.

Recipients will be required to manage their projects in accordance with FTA Circular 6100.1C: Transit Research and Technology Programs: Application Instructions and Program Management Guidelines: http://www.fta.dot.gov/laws/circulars/leg_reg_4121 . This includes requirements for project management and administration, including quarterly reporting, financial management, and payments.