



March 26, 2012

Peter M. Rogoff  
Administrator  
Federal Transit Administration  
1200 New Jersey Avenue, SE  
Washington, DC 20590

RE: Docket Number FTA-2010-0009

Dear Administrator Rogoff,

On behalf of the Center for Transit-Oriented Development (CTOD), we write to provide comments on the Federal Transit Administration's Notice of Proposed Rulemaking (NPRM) and proposed Policy Guidance for the New Starts and Small Starts programs. CTOD appreciates the opportunity to submit comments to FTA regarding the evaluation process and criteria for these important programs.

CTOD is the only national effort dedicated to providing best practices, research, and tools to support equitable market-based transit-oriented development (TOD). CTOD partners work with both the public and private sectors to strategize about ways to encourage the development of high-performing communities around transit stations and to build transit systems that maximize development potential. CTOD is a partnership of Reconnecting America, the Center for Neighborhood Technology (CNT), and Strategic Economics. Reconnecting America is a national nonprofit that helps transform promising ideas into thriving communities, where transportation choices make it easy to get from place to place, where businesses flourish, and where people from all walks of life can afford to live, work, and visit. CNT is a creative think-and-do tank that advances urban sustainability by researching, inventing, and testing strategies that use resources more efficiently and equitably. Strategic Economics is an urban and regional economics and research firm.

CTOD receives federal funding to evaluate best practices in TOD, to research economic development impacts of transit investments, and to help develop standards and guidelines for TOD. However, we did not use federal funds to develop these comments. Our recommendations reflect many years of discussion with developers, local economic development directors, the transit industry, community development practitioners, land planners, academics, residents, and employers, as well as our own experience working with communities that are trying to build transit networks and promote mixed-income, transit-oriented development.

CTOD supports FTA's stated goals of measuring a wider range of the benefits that transit projects provide, and establishing measures and procedures to streamline the New Starts and Small Starts project development process. We believe that FTA's proposed changes are a significant step toward achieving those dual goals. Under the proposed structure, we believe that the timeframe for project development will be reduced, allowing project sponsors to bring their projects to completion sooner, and the projects' benefits to be realized earlier. In addition, we believe that the changes proposed would help to elevate those projects which will provide the maximum benefits to the communities they serve as well as to the federal government.

Within the context of our overall support, we offer suggestions to improve or refine some of the elements of the NPRM and the Policy Guidance. The following comments are organized by issue area, and cover both the NPRM and the Guidance. In keeping with CTOD's mission, our primary focus is on the evaluation of projects in terms of their impact on their corridors and regions, rather than on the specific stages of project development, local financial commitment, or operational issues. CTOD expresses neither support nor opposition on any issue in the NPRM or Guidance which is not specifically addressed below.

### **PROJECT JUSTIFICATION CRITERIA**

#### **1. Mobility Improvements**

##### **a. CTOD supports the proposed change in the metric from transportation system user benefits to trips (i.e. boardings) on the project.**

CTOD supports FTA's proposed change from transportation system user benefits (TSUB) to trips taken on the project as the measure for mobility improvements. While the original intent of the TSUB measure was to capture a broad range of mobility benefits, in practice it has proven difficult to measure elements such as time saved for highway commuters in the project corridor. On the other hand, ridership is an easily understood, quantifiable outcome of transit projects that can be used as an indicator of a project's success in a community.

While we understand FTA to mean "boardings" by its use of the term "trips", we recommend that FTA clarify this in the final rule to ensure a consistent understanding of the metric being proposed.

##### **b. CTOD recommends that FTA evaluate both current year and future year ridership, over a 20-year horizon, compared to the no-build alternative.**

While CTOD appreciates FTA's desire to simplify the application process for project sponsors, we believe it is important for sponsors to present information not only regarding current year ridership, but also ridership in future years. This approach will enable FTA to ensure that projects are built to handle not only existing conditions, but also future conditions. If future ridership is not incorporated into project

planning, we are concerned that project sponsors will be discouraged from building systems with sufficient capacity to handle future ridership growth. When projects are scaled back to handle only near-term ridership, project sponsors, local communities, and taxpayers will ultimately have to pay to expand capacity at some point in the future, often at greater cost than would have been incurred had the necessary capacity been included originally. The 20-year horizon is appropriate because it is consistent with the timeframe covered by regions' long-range transportation plans and with federal requirements for highway investments.

Even under this proposed approach, project sponsors will likely save time and money compared to the current application process due to FTA's proposed changes in the baseline alternative, which CTOD supports. Rather than the artificially constructed "Transportation System Management" alternative (which generally includes a set of smaller-scale projects that are unlikely ever to be built), FTA proposes to allow project sponsors to compare their projects to a "no-build" alternative, including the existing transportation network and those projects which have been committed to in the region's Transportation Improvement Program (TIP). This is a sensible change which will help to better demonstrate the benefits of a proposed project while reducing time and cost for project sponsors.

**c. FTA should incorporate job accessibility into its national ridership model.**

CTOD appreciates FTA's intent to establish a national model for estimating project trips. CTOD strongly encourages FTA to include within that model a calculation of how many existing jobs will be made accessible to fixed-guideway transit stops by proposed projects.

Such a measure of job accessibility is highly predictive of transit ridership.<sup>1</sup> The commute trip makes up 59 percent of transit trips<sup>2</sup>, and only 18 percent of auto trips.<sup>3</sup> Transit projects that do a good job linking workers to employment centers will generate higher ridership than those that do not, even if the number of residents living near the projects are the same. In fact, research has shown that employment densities at trip destinations exert greater influence on ridership than residential densities near trip origins.<sup>4</sup> In regions with strong suburban employment centers, they also serve to optimize the transit investment by promoting bidirectional flows throughout the course of the day.

For example, in "The Importance of Trip Destination in Determining Transit Share," Gary Barnes highlights the importance of employment density in increasing transit ridership in the Twin Cities.<sup>5</sup> His work finds that increases in employment density can result in increased transit share from origins with

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<sup>1</sup> Wood, Jeffrey, Mariia Zimmerman, and Shelley Poticha. *Destinations Matter: Building Transit Success*. Center for Transit-Oriented Development, May 2009.

<sup>2</sup> *A Profile of Public Transportation Passenger Demographics and Travel Characteristics Reported in On-Board Surveys*. American Public Transportation Association, 2007.

<sup>3</sup> Pisarski, Allan E., *Commuting in America III: the Third National Report on Commuting Patterns and Trends*. Transportation Research Board (TCRP Report 110), 2006.

<sup>4</sup> TCRP Report 128 – Effects of TOD on Housing, Parking, and Travel, Arrington & Cervero, 2008

<sup>5</sup> Barnes, Gary. *The Importance of Trip Destination in Determining Transit Share*. *Journal of Public Transportation*, Vol. 8, 2005.

residential density held constant, a similar finding of earlier work by Zupan and Pushkarev.<sup>6</sup> Barnes emphasizes the relationship between residential origins and destinations, noting that “Residential neighborhood characteristics matter, but the extent to which they matter is very strongly influenced by where people are going.”

Job accessibility can be incorporated into the FTA’s model through the use of the Employment Accessibility Index, which is part of the Housing +Transportation Affordability Index (H+T Index).<sup>7</sup> The index uses the US Census Bureau’s Local Employment Dynamics data at the Census block level. The accessibility index is a sum of all jobs weighted by the inverse square of the distance within a 63 mile radius of a given block group. The Center for Neighborhood Technology recently updated the H+T Index to include the latest Census data – American Community Survey data through 2009.

Additionally, the H+T Index includes two measures of transit access, the Transit Connectivity Index and the Transit Access Shed. Data used in the construction of these indices are a compilation of publicly available General Transit Feed Specification (GTFS) data as well as GTFS data provided to CNT by transit agencies and GTFS data created by CNT from publicly available sources. Where GTFS data was not available, CNT created data in this format using public information from transit agency websites including maps, schedules, and stop locations. When more detailed information was needed than what was available on the websites, CNT contacted agencies directly. Transit stops and stations in more than 50 percent of metropolitan and micropolitan areas with scheduled transit service are currently included in the database, or 445 transit systems.

The use of these measures provides a sound basis for evaluating local jobs access, including a detailed understanding of the relationship of transit service to employment locations. The H+T Index can be found at <http://htaindex.cnt.org/> and the methodology is explained at <http://htaindex.cnt.org/downloads/HTMethods.2011.pdf> .

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<sup>6</sup> Zupan, Jeffrey and Pushkarev, Boris. *Public Transportation and Land Use Policy*. Regional Plan Association, 1977.

<sup>7</sup> For further information regarding the Affordability Index, see Susan Wachter, Richard Voith et. al. “A Review of the Center for Neighborhood Technology’s Housing and Transportation Affordability Index,” University of Pennsylvania Institute for Urban Policy Research & E-Consult Corporation, submitted to the Manhattan Strategy Group, February 2012 at <http://portal.hud.gov/hudportal/documents/huddoc?id=HTA-index.pdf>; Carrie Makarewicz, Peter Haas, Albert Benedict, Scott Bernstein “Estimating Transportation Costs for Households by Characteristics of the Neighborhood & Household,” Transportation Research Record—Journal of the Transportation Research Board Number 2077, National Academy of Sciences, December 2008; John Holtzclaw, Robert Clear, Hank Dittmar, David Goldstein & Peter Haas; “Location Efficiency: Neighborhoods and Socioeconomic Characteristics Determine Automobile Use;” *Transportation Planning and Technology*, 2002, V. 25, 1-27; and Center for Neighborhood Technology & Center for Transit Oriented Development, *The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice*, Brookings Institution, 2006 at [http://www.brookings.edu/reports/2006/01\\_affordability\\_index.aspx](http://www.brookings.edu/reports/2006/01_affordability_index.aspx)

Given the importance of employment accessibility in determining transit ridership, CTOD believes FTA should include a calculation of existing jobs within ½ mile of the proposed stations in the national model for ridership.

**d. FTA should establish breakpoints for ridership to ensure that only the strongest projects advance.**

As stated above, CTOD supports FTA’s proposed shift to project trips as the measure of mobility improvements. CTOD notes, however, that the effectiveness of this change in helping FTA to evaluate projects depends in large measure on how FTA establishes the breakpoints that will determine the ratings under this criterion. Recognizing that different modes are likely to generate different ridership, and that regions and corridors have different characteristics, we look forward to reviewing FTA’s proposed breakpoints to assess their effectiveness in advancing those projects that will achieve the strongest ridership. We encourage FTA to consider establishing a minimum ridership threshold which all proposed projects must meet, and then providing breakpoints for higher ratings which would be normalized for different project types. Breakpoints should be established in a way that will incentivize project sponsors to select alignments, station locations, and other project features that will maximize ridership.

**e. FTA should clearly define “transit-dependent” so that all project sponsors use a consistent definition.**

CTOD notes that the inclusion of additional weight for trips taken by transit dependent individuals in the calculation of mobility improvements serves multiple goals, by increasing the likelihood that a project will provide connectivity to jobs and services for those who cannot or choose not to own a car. CTOD notes, however, that this metric must be applied consistently across the country in order to achieve a meaningful comparison of projects nationwide. CTOD recommends that FTA specifically define “transit-dependent,” which as FTA noted can be determined in terms of income level (percentage of area median income) or car ownership (which could vary by household size, as a two-worker household with only one car can be considered transit-dependent), in order to ensure consistent evaluation under this criterion.

**2. Environmental Benefits**

**a. CTOD supports FTA’s goal of measuring a wider range of environmental benefits.**

CTOD supports FTA’s efforts to develop a more meaningful approach to evaluating the environmental benefits of New Starts projects. Although CTOD recommended in its comments to the ANPRM that FTA not attempt to monetize environmental benefits due to the wide range of environmental benefits that transit projects provide and the difficulty of measuring those benefits, CTOD understands the potential value of the approach that FTA has laid out in the NPRM. CTOD stands ready to work with FTA to develop improved methods of modeling VMT change to ensure that the most accurate evaluation tools possible are available to support FTA’s goal of monetizing environmental benefits.

**b. CTOD supports the inclusion of public health under environmental benefits.**

CTOD strongly supports the inclusion of public health impacts under the environmental benefits criterion, and looks forward to working with FTA and other stakeholders to develop the tools that will allow this factor to be fully considered in the evaluation process. The health benefits of using public transportation are well-documented. Using public transportation has been shown to promote physical activity in a number of research studies. Transit users on average take 21% to 30% more steps per day than people who drive to work and are more likely to be physically active and maintain a healthy weight.<sup>8</sup> Transit riders tend to walk more because they have to travel on foot to get to and from the transit stop, as well as their origins and destinations. Using U.S. National Household Travel Survey data, researchers found that 29% of public transit users walked over 30 minutes per day just getting to and from the station, thereby meeting the government’s recommended levels of daily physical activity.<sup>9</sup> A recent study also found that people can lose weight by switching from driving to transit. Charlotte light rail riders lost an average of 6.45 pounds after switching from driving to transit for a year.<sup>10</sup> In addition, overall increased use of transit can help reduce adverse health outcomes associated with asthma and other chronic diseases by reducing driving and greenhouse gas emissions. Improved public health has a benefit not only for individuals, but also for the public sector, which realizes a fiscal benefit through reduced health care costs. Therefore, those transit projects which maximize public health benefits should receive credit for those positive impacts in the New Starts evaluation process.

**c. CTOD recommends that FTA not include the cost of betterments in the environmental benefits evaluation.**

CTOD understands that FTA is proposing to compare the environmental benefits of proposed projects with the projects’ annualized capital and operating cost. In order to avoid creating a disincentive for project sponsors to invest in project features that will create long-term benefits, but are not directly related to mobility improvements in the short-term, CTOD recommends that FTA subtract the cost of “betterments” from the costs included in the environmental benefits evaluation. This concept is discussed more fully in the cost-effectiveness section, below.

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<sup>8</sup> Wener R and Evans G. “A Morning Stroll—Levels of Physical Activity in Car and Mass Transit Commuting.” *Environment and Behavior*, 39(1): 62–74, January 2007; Edwards R. “Public Transit, Obesity, and Medical Costs: Assessing the Magnitudes.” *Preventive Medicine*, 46(1): 14–21, January 2008; and Lachappelle, U., & Frank, L.D. (2009), Transit and health: Mode of transport, employer-sponsored public transit pass programs. *Journal of Public Health Policy*, 30: S73-S94.

<sup>9</sup> Besser, L.M. & Dannenberg, A.L. (2005). Walking to public transit steps to help meet physical activity recommendations. *American Journal of Preventive Medicine*, 29(4): 273-280.

<sup>10</sup> “Public Transit Systems Contribute to Weight Loss and Improved Health, Study Finds.” *Science Daily*, June 29, 2010. Available at <http://www.sciencedaily.com/releases/2010/06/100628203756.htm> (last accessed October 2, 2011).

### **3. Economic Development Effects**

#### **a. CTOD supports the inclusion of affordable housing in the evaluation of economic development effects.**

As CTOD's ANPRM comments indicate, we believe that all U.S. DOT capital funding programs should maximize the location efficiency benefits of transportation investments by elevating projects that demonstrate local commitment to preserve and create permanently-affordable housing. In particular, because transit investments may lead to rising property values near federally funded stations, the FTA should prioritize New Starts and Small Starts projects that (1) maintain housing affordability for existing station area residents to prevent displacement and (2) create new affordable housing near stations so that low-income households may also benefit from federal investment in transit infrastructure. For this reason, CTOD strongly supports FTA's inclusion under economic development of plans and policies in place to maintain or increase affordable housing in the corridor. At the same time, in order to promote balanced mixed-income housing in those areas with significant concentrations of affordable housing, plans should include policies for attracting workforce and market-rate housing.

#### **b. CTOD recommends consideration of employment centers in the required analysis of economic development effects.**

As highlighted above in the section on mobility improvements, the strong relationship between job accessibility and transit ridership justifies inclusion of policies related to job growth and employment centers as part of the economic development evaluation. In addition to the ridership benefits discussed above, transit-oriented employment is space efficient (200-250 sq ft/employee, compared to residential development at 500-1,000 sq ft/resident) and often more economically feasible than increasing residential densities, given the agglomeration benefits that business districts and commercial corridors provide.<sup>11</sup> FTA should review policies indicative of local commitment to job growth near the proposed project, such as economic development strategies related to attracting targeted clusters, flexible zoning, minimum floor area ratios, minimum employment densities, and maximum parking ratios, as well as the presence of local funding mechanisms and incentives including TIF, BID/LIDs, etc. Given current economic conditions and the continuing decentralization of employment, greater emphasis should be placed on the job creation and retention potential of the transit investment.

To that end, project sponsors should be required to map all of the region's major employment concentrations, and then to demonstrate how the proposed project would connect to one or more those concentrations, or create a critical link between two other transit lines, allowing transit riders to have greater job accessibility with only one transfer. This information is readily available through U.S. Census Bureau Local Employment Dynamics data. The project sponsor should also be required to demonstrate how plans and policies related to future employment growth would reinforce the

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<sup>11</sup> Barnes, Gary. 2005. "The Importance of Trip Destination in Determining Transit Share." *Journal of Public Transportation* 8 (2): 1-16.

employment centers connected by the project. This will enable FTA to determine which project sponsors will most effectively leverage the new transit investment to create economic benefits for the region.

**c. CTOD recommends using a market analysis as the best predictor of future development outcomes.**

CTOD understands that FTA is proposing to give project sponsors the option to develop a projection of future economic development effects in order to conduct a quantitative analysis based on the resulting VMT changes. FTA indicates in the proposed Policy Guidance that the projection would be based on “the economic conditions in the project corridor; the mechanisms by which the project would improve those conditions; the availability of land in station areas for development and redevelopment; and a pro forma assessment of the feasibility of specific development scenarios.”

CTOD believes that a quantitative analysis of future economic development effects is essential to determining which projects should advance through the New Starts and Small Starts process. We look forward to working with FTA to help develop the tools that will allow the quantitative analysis to become a required component of the evaluation process.

In the meantime, CTOD does not believe that the set of factors proposed by FTA would produce the best projections for future development around the project. CTOD’s recent report, “Rails to Real Estate: Development Patterns along Three New Transit Lines”, shows that land supply and zoning policy are poor predictors of future development in transit corridors. Therefore, we think other market factors should be used to measure potential economic development activity along a proposed transit corridor. Such factors could include the number and value of any real estate investments made in the corridor over the past five years, the number of major job and/or major cultural/entertainment/educational institutions along the corridor, and the proximity of transit stations with development potential to these major activity centers. Other market factors could include average rents/sales prices per square foot in the corridor by land use type as compared to the larger surrounding area, vacancy rates in the corridor also compared to a larger geography, and recent project absorption. If weak market areas are being considered for transit investments, then ridership numbers should be high enough to address a lack of near-term market activity.

**4. Cost-effectiveness.**

**CTOD supports exclusion of “betterments” from project cost and recommends a broad definition of “betterments”.**

In its response to the Advance Notice of Proposed Rulemaking, CTOD recommended that FTA consider only the federal contribution when evaluating cost-effectiveness, so that project sponsors would not be penalized for using non-federal funds to finance project features that would provide locally-preferred transit types, service levels, route alignments, transit vehicles, station amenities, or expansion capacity.

Many of these features have long-term benefits for communities, but add to the up-front costs of projects, hindering their ability to achieve the necessary rating on the cost-effectiveness measure.

CTOD recognizes that FTA did not adopt that recommendation, but appreciates FTA's willingness to exclude the cost of "betterments" from project cost for purposes of the cost-effectiveness calculation. This change will help to move FTA's evaluation process toward the goal that CTOD advanced, allowing project sponsors to invest in certain project features that will have long-term benefits, but which are not directly related to improved mobility in the short-term.

In order to ensure that project sponsors have an incentive to invest in those project features that will ultimately yield the maximum benefits for the community, CTOD recommends that FTA adopt a broad definition of "betterments," including all of the examples listed in the preamble to the proposed rule, and in addition capacity and access improvements which will save costs down the road. Too often, project sponsors who have had to scale back projects to achieve a satisfactory cost-effectiveness rating find themselves in a few short years having to make additional capital investments, at greater cost, to accommodate their growing ridership. For example, the light rail line in Charlotte, NC was originally planned as a 3-car system, but was scaled back to 2-cars in order to score well on cost-effectiveness. Due to the success of the line, the city is now retrofitting stations to accommodate 3-car trains, as a cost of \$67 million.<sup>12</sup> Also, many alignments run adjacent to freeways such as the Southeast Corridor in Denver and the Green Line in Portland, allowing for lower project costs but also minimizing the long-term potential of that transit system to reshape the adjacent land uses in a way that supports multimodal accessibility and transit-oriented development.

To avoid future examples such as those cited above, FTA should include in the definition of "betterments" project features that provide project sponsors with the ability to conduct station area planning or other activities that support future transit-oriented development, expand capacity, and provide improved access to surrounding neighborhoods. The incremental cost of these project betterments should be excluded from the cost side of the cost-effectiveness evaluation. In the long run, this approach will promote more efficient use of federal funds and will achieve the maximum benefits from transit investments.

CTOD also recommends that the exclusion of betterments from cost under the cost-effectiveness criterion be included in the regulation itself, not only in the policy guidance as is currently proposed. This will ensure a level of consistency in application of the regulation which will allow project sponsors to plan their projects with more certainty.

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<sup>12</sup> Voorhees, Josh. *A Southern Success Story Offers a Lesson on Livability*. Greenwire, 04/05/2010.

## **5. Land Use**

### **a. CTOD supports the inclusion of affordable housing in the land use evaluation.**

As stated above, CTOD believes that all U.S. DOT capital funding programs should maximize location efficiency benefits of transportation investments by elevating projects that demonstrate local commitment to balanced mixed-income housing with policies for preserving and creating permanently-affordable housing in at-risk corridors. In addition, residents of affordable housing are more likely to use transit if it is available. For this reason, we strongly support FTA's proposal to include the number of publicly-supported housing units in the transit corridor in the evaluation of transit-supportive land use.

### **b. CTOD recommends including current job connectivity in the land use evaluation.**

As discussed above, job connectivity is one of the best predictors of transit ridership. Therefore, the number of existing jobs within the transit corridor is one of the strongest indicators of transit-supportive land use. For this reason, CTOD recommends that existing jobs be included in the same manner that existing publicly-supporting housing units are proposed to be included.

## **EVALUATION PROCESS CHANGES**

### **CTOD supports the increased use of warrants proposed in the NPRM and Guidance.**

One of the major themes running through CTOD's comments to the ANPRM was the importance of streamlining the evaluation process. Doing so would shorten the time it takes to bring projects to completion and save money for both local communities and the federal government. Although CTOD had proposed the use of warrants only in the environmental benefits evaluation, we believe that the use of warrants for other criteria as well would be an effective means of streamlining the evaluation process. CTOD looks forward to reviewing the forthcoming Policy Guidance in which FTA will identify project and corridor characteristics that will allow project sponsors to make use of warrants. In addition, CTOD encourages FTA to establish the warrants with a goal of further streamlining the process, particularly for Small Starts applicants.

## **CONCLUSION**

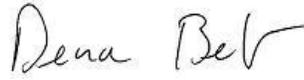
CTOD greatly appreciates the opportunity to provide this input into FTA's NPRM and Policy Guidance for the New Starts and Small Starts programs. As stated at the outset, we support FTA's goals of both streamlining the evaluation process and capturing a broader range of transit projects' benefits, and we believe that the NPRM and Guidance significantly advance both goals. We look forward to reviewing and commenting on the forthcoming Policy Guidance which we understand will include additional

details regarding weights and breakpoints for the factors within the evaluation criteria. In the meantime, please contact Sarah Kline at (202) 429-6990 x202 or [skline@reconnectingamerica.org](mailto:skline@reconnectingamerica.org) with any questions about these comments.

Sincerely,



John Robert Smith  
President and CEO  
Reconnecting America



Dena Belzer  
President  
Strategic Economics



Scott Bernstein  
President  
Center for Neighborhood Technology