Article Title: ARCHIVE | Criteria | Governments | General: Mass Transit Enterprise Ratings: Methodology And Assumptions Data: (EDITOR'S NOTE: —This criteria article is no longer current. It has been superseded by "Global Not-For-Profit Transportation Infrastructure Enterprises: Methodologies And Assumptions," published Nov. 2, 2020.) 1. This article presents S&P; Global Ratings' methodology for assigning stand-alone credit profiles (SACPs), issuer credit ratings (ICRs), and issue credit ratings to public mass transit systems globally. These criteria are intended to provide additional transparency and comparability to help market participants better understand our approach to assigning mass transit system ratings, to enhance the forward-looking nature of these ratings, and to enable better comparisons between these ratings and all other ratings. 2. The glossary in section IV defines certain terms that are used throughout these criteria. 3. This article is related to our criteria article "Principles Of Credit Ratings," published Feb. 16, 2011. I. SCOPE OF THE CRITERIA 4. These criteria apply to the assignment of SACPs, ICRs, and issue ratings to all public mass transit systems globally. Most of the discussion in this criteria relates to the methodology by which the final SACP is determined, since the final SACP is the starting point from which the ICR and issue rating (if applicable), are determined. We most commonly define a public or municipal mass transit enterprise as one lacking a profit motive and fulfilling a public mission or mandate to deliver a good or service. By contrast, transportation infrastructure companies operating in the same sectors but fulfilling the mandate of commercial operators are analyzed using "Key Credit Factors For The Transportation Infrastructure Industry," published Nov. 19, 2013. 5. For issue ratings, these criteria apply to revenue bonds issued (most commonly in the U.S.) by mass transit systems and secured by a pledge of farebox revenues, gross or net revenues, or a full-faith-and-credit pledge, with the final issue rating reflecting, when applicable, the specific bond provisions according to "Methodology: Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations," published Nov. 29, 2011. 6. These criteria do not apply to bonds issued by mass transit systems that are secured solely by a pledge of priority-lien tax revenue (see "Priority-Lien Tax Revenue Debt," published Oct. 22, 2018, for additional details), or to bonds issued by mass transit systems that are secured solely by a pledge of federal grants (see "Rating U.S. Federal Transportation Grant-Secured Obligations," published May 29, 2009). The criteria also generally do not apply to start-up systems, as these are most likely to be more project-based in their infancy and would be assessed using our project finance criteria, "Project Finance Framework Methodology," "Project Finance Transaction Structure Methodology," and "Project Finance Operations Methodology," published Sept. 16, 2014, as well as "Project Finance Construction Methodology," published Nov. 15, 2013, and "Project Finance Construction And Operations Counterparty Methodology," published Dec. 20, 2011. II. SUMMARY OF THE CRITERIA 7. These criteria are used to assign SACPs, ICRs, and issue ratings to mass transit systems globally using a framework that considers the enterprise risk and financial risk for the mass transit system. The methodology addresses the factors that affect a mass transit system's willingness and ability to service its debt on time and in full. 8. Nine factors form the foundation of the mass transit credit analysis that determines the indicative SACP and are scored on a scale from '1' (strongest) to '6' (weakest). Four factors--industry risk, economic fundamentals, market position, and management and governance-- determine the enterprise risk profile. Five factors--financial policies, debt service coverage, liquidity, financial flexibility, and debt burden--determine the financial risk profile. The scores for the enterprise and risk profiles are based on a weighted average of the scores of each factor outlined above. 9. The indicative SACP is derived by combining the financial and enterprise risk scores in accordance with table 1. In cases when the matrix presents a range of ratings, the choice between the two ratings is based on our view of the future performance of the factors composing the enterprise and financial risk profiles. The indicative SACP can be raised or lowered by one notch based on peer comparisons to arrive at the final SACP. 10. The final SACP can be capped (i.e., the final rating can't be higher, but can be lower than a defined rating cap) due to the presence of certain conditions. SACP caps are absolute such that the positive adjustments allowed under these criteria do not permit the final SACP to exceed the cap. If multiple caps exist, the lowest cap prevails. Factors that cap the final SACP are: A liquidity score of '4' caps the final SACP at 'a+'. Although liquidity receives limited weight compared to all other enterprise and financial risk factors combined (all other enterprise and financial risk factors combined are 75%), the importance of liquidity grows as the liquidity score weakens. This is

our view since, in most cases, a default could be averted through the use of liquidity; A liquidity score of '5' caps the final SACP at 'bbb+'; A liquidity score of '6' caps the final SACP at 'bb+'; A debt service coverage (DSC) score of '5' or '6' caps the final SACP at 'a-', as we believe a weak DSC score indicates that the system lacks structural balance, and future cash flow (and credit quality) could be jeopardized. Some transit systems may have very large cash balances that are being used to pay debt service, and, in those cases, management might choose to temporarily avoid fare increases or not make other revenue adjustments (or choose not to adjust expenses) until these large cash balances are reduced. However, in our view, the inability to cover annual debt service from recurring net revenues is a credit weakness; A management and governance or financial policies score of '6', for reasons other than a weak payment culture, caps the final SACP rating at 'bb-'. If a mass transit system has the ability to manage important strategic and operating risks, then its management plays a positive role in determining its operational success. Alternatively, a weak management with a flawed operating strategy or an inability to execute its business plan effectively is likely to substantially weaken a mass transit system's credit profile. Likewise, in terms of financial policies, a system's ability to implement timely and sound financial and operational decisions in response to economic and fiscal demands is a key determinant of near-term changes in credit quality; A liquidity score of '6' combined with a management and governance or financial policies score of '6' cap the final SACP at 'b-'; A financial flexibility score of '4' or worse caps the final SACP at 'a+'. We expect mass transit systems with SACPs of 'aa-' or higher to have a high level of control of revenues and limited fixed obligations. Mass transit systems with relatively weak levels of financial flexibility are more likely to experience financial challenges and difficulties in meeting obligations; A financial flexibility score of '5' or '6' combined with a management and governance score of '5' cap the final SACP at 'bb'. 11. If any obligation of the mass transit system is currently vulnerable to nonpayment (including due to a weak credit culture or low willingness to support debt service) and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on such obligation, then we will determine the issuer's SACP using "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012. If the issuer meets the conditions for assigning 'CCC+', 'CCC', 'CCC-', and 'CC' ratings, we will not apply table 1. 12. Once the final SACP is established, the mass transit system ICR will equal the final SACP for those mass transit systems that are not considered to be government-related entities. For mass transit enterprises considered to be government-related entities (GREs), the criteria, "Rating Government-Related Entities: Methodology and Assumptions," published March 25, 2015, will be applied to derive the ICR. 13. Public mass transit enterprises typically issue debt secured by a pledge of farebox revenues, a gross or net (net of operating expenses) revenue pledge, or a full-faith-and-credit pledge. We expect that a mass transit issue rating and a mass transit system ICR will usually be the same. Examples of situations where they might differ are when the issue rating relates to subordinate-lien debt, or where the senior-lien debt contains bond provisions that are either highly permissive or highly restrictive, including, but not limited to, provisions related to debt service reserve funds or which limit the ability of the mass transit system to issue additional debt. See section V. D on Revenue Bond Covenant And Payment Provisions Considered For Issue Ratings. 14. This paragraph has been deleted. 15. This paragraph has been deleted. III. MASS TRANSIT RATING CALIBRATION 16. The overall calibration of the mass transit ratings criteria is based on our analysis of the history of rating transitions in the rated universe (there were no defaults among the rated mass transit credits globally but we have observed cases of severe credit deterioration), the effect of the financial and economic crisis on the entities' creditworthiness, and our view of the credit strengths and weakness of this sector compared with other sectors. 17. The mass transit sector enjoys unique strengths compared to the corporate sector that allow for ICRs, issue ratings or stand-alone credit profiles to be largely investment grade. These include: The high essentiality of transit systems and generally high service quality, with, in most cases, virtually no competing transit providers; The enduring demand for transit through economic cycles, which leads to high certainty with regard to fare revenues; Financial flexibility driven by generally low fares and autonomous fare-raising ability; The proven ability, in most cases, to adjust operating expenses to align costs with revenues, which is especially important during economic downturns, although there may be some lag; Generally good access to external liquidity, especially for systems in the U.S., although external funding for many

systems in Europe may be limited to the governmental owner; A sustained track record of consistent nonoperating revenues (such as sales taxes), subsidies and capital grants, which allows for lower fares than would exist otherwise; and For systems in Europe, the receipt of robust ongoing support from and close monitoring by government owners, helping to bolster systems' access to funding. In addition, government owners' record of ongoing support to help mass transit systems avoid financial stress, for political and reputational reasons, support relatively high credit quality in the sector. 18. On the other hand, mass transit entities also face sector-specific challenges and risks that can limit upside rating potential. These include: The capital intensive nature of the operations, including pressure to fund capital projects and high maintenance costs from available system revenues after the payment of debt and operating expenses; The limited ability to accumulate large cash reserves, given infrastructure needs and political pressure to keep fares affordable; The generally break-even nature of overall financial operations, where all-in debt service coverage well above 1x is often difficult to achieve, and this introduces cash flow challenges; and Heavy reliance on operating subsidies and grants to fund operations and capital, as fares or tariffs alone are insufficient to cover operating costs. 19. These criteria reflect our view of the credit strengths and weaknesses of the industry. S&P; Global Ratings also calibrates its rating criteria on its general framework for the idealized behavior of its credit ratings over time through economic cycles. Three articles outline our framework: Understanding S&P; Global Ratings' Rating Definitions, published June 3, 2009; Credit Stability Criteria, published May 3, 2010; and The Time Dimension Of Standard & Poor's Credit Ratings, published Sept. 22, 2010. IV. GLOSSARY 20. Cash Flow Coverage.Cash flow from operations from the cash flow statement, plus interest expense, plus local and state government subsidies received as a nonoperating revenue (sometimes called "cash flows from noncapital financing activities"), the sum of which is divided by debt service (principal and interest expense) 21. Catchment Area.The geographic region that has direct access to the mass transit system, and could include several cities and several counties, and even cross states in the case of the U.S. 22. Days' Cash.Days' cash allows us to measure how long the system could operate if all collection of revenues ceased. This calculation focuses on unrestricted cash plus available cash from lines of credit and divides these available cash resources by annual operating expenses before depreciation and amortization. This ratio is then multiplied by 365 days in a year to get days' cash. 23. Debt Service Carrying Charge.Debt service (principal and interest) divided by the sum of debt service and operating expenses (where operating expenses exclude depreciation and amortization). 24. Debt Service Coverage.Debt service coverage (DSC) equals net revenues available for debt service divided by debt service. This measures near-term capacity to service debt from recurring net revenues. When calculating debt service, for nonamortizing debt we assume the actual fixed rate or a 3.5% variable interest rate with principal payments spread over 30 years or less, as we assess appropriate. These interest rates and assumptions may be adjusted depending on policy rate environment, and rates by country. 25. Farebox Recovery Ratio.The farebox recovery ratio is calculated as farebox revenues divided by annual operating expenses before depreciation and amortization. It allows for an analysis of what portion of total operating costs is recovered from fares alone. In rough terms, the balance of operating expenses not covered by fares would be recovered from other revenue sources, such as state, federal and local grants, or other nonoperating revenues such as sales taxes. 26. Issuer Credit Rating (ICR).An S&P; Global Ratings issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness in order to pay its financial obligations. This opinion focuses on the obligor's capacity and willingness to meet its financial commitments as they come due. It does not apply to any specific financial obligation, as it does not take into account the nature of and provisions of the obligation, its standing in bankruptcy or liquidation, statutory preferences, or the legality and enforceability of the obligation. 27. Net Revenues Available for Debt Service.The sum of both operating and nonoperating revenues net of operating costs, with operating costs excluding depreciation and amortization, and other noncash items such as capital gains (in many cases, we might make additional adjustments to net revenues available for debt service, including, for example, nonrecurring events such as asset sales). Nonoperating revenues include items such as interest earnings on cash and investments, operating subsidies, sales taxes, but not subsidies or grants that are restricted for capital projects or otherwise not legally available for the payment of debt service. 28. Ridership.The number of passengers carried annually by the mass transit system. 29.

Stand-alone Credit Profile (SACP).S&P; Global Ratings' opinion of an issue's or issuer's creditworthiness, in the absence of extraordinary intervention from its parent or affiliate or related government, if applicable. It is a component of a rating, not a rating itself. We use lower-case symbols, for example 'aaa', or 'aa', to designate SACPs, and may modify the symbol with a "+" or "-" sign, depending on the specificity of the relevant analysis. 30. For additional definitions, see "Methodology: Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations," published Nov. 29, 2011. V. METHODOLOGY A. Overall Framework for Rating Mass Transit Systems 31. These criteria are used to assign SACPs, issuer, and issue ratings to mass transit systems, using an overall framework that considers both the enterprise risk profile and the financial risk profile of the system. The enterprise risk profile is an evaluation of the risks associated with the mass transit system as a business, both internally and externally. The factors considered for the enterprise risk profile include our assessment of industry risk, economic fundamentals, market position, and management and governance. The financial risk profile is an evaluation of the various qualitative and quantitative metrics that are important in measuring capacity of a mass transit system to repay on time and in full any and all obligations, and performance relative to legally covenanted minimum protections established for the benefit of bondholders. The factors considered for the financial risk profile include our assessment of financial policies, debt service coverage, liquidity, financial flexibility, and debt burden. 32. The enterprise and financial risk scores are computed by combining (see chart 1) and then rounding (to the nearest whole number) the weighted average of the individual scores. The indicative SACP results from the combination of the enterprise and financial risk scores as shown in table 1 below. In cases when the matrix presents a range of ratings, the choice between the two ratings is based on our view of the future performance of the factors composing the enterprise and financial risk profiles. 33. The criteria also include various caps and one override (see paragraphs 10-11) as well as the ability to raise or lower the SACP by one notch based on peer comparisons (see paragraph 9) to establish the final SACP. The summary of the caps is presented in table 2 below. The mass transit system ICR is equal to the final SACP for those systems that are not considered GREs. For other systems (mostly in Europe, where GRE mass transit enterprises prevail), the ICR is established though the application of the GRE criteria. 34. The application of these criteria will result in an SACP that could then be constrained by the relevant sovereign rating and transfer and convertibility assessment affecting the entity when determining the ICR. In order for the final ICR to be higher than the applicable sovereign rating or transfer and convertibility assessment, the entity will have to meet the conditions established in "Methodology And Assumptions: Ratings Above the Sovereign – Corporate And Government Ratings," published Nov. 19, 2013. Table 1 Determining The Indicative SACP For A Mass Transit System FINANCIAL RISK PROFILE ENTERPRISE RISK PROFILE 1 2 3 4 5 6 Extremely strong Very strong Strong Adequate Vulnerable Highly vulnerable 1 Extremely strong aaa aa+ aa- a bbb+/bbb bb+/bb 2 Very strong aa+ aa/aa- a+ a- bbb/bbb- bb/bb- 3 Strong aa- a+ a bbb+/bbb bbb-/bb+ bb- 4 Adequate a a/a- a-/bbb+ bbb/bbb- bb b+ 5 Vulnerable bbb+ bbb/bbb- bbb-/bb+ bb bb- b 6 Highly vulnerable bbb- bb bb- b+ b b- 35. Once the ICR is assigned, the issue rating is derived by an analysis of the priority of the lien and specific provisions as explained in section V. D. Table 2 Summary Of SACP Caps And Overrides SCORE OUTCOME OR CONDITION FINAL SACP LIMITED TO Liquidity 4 'a+' Liquidity 5 'bbb+' Liquidity 6 'bb+' Debt service coverage (DSC) 5 or worse 'a-' Management and governance or financial policies 6 'bb-' Liquidity and management and governance or financial policies Both 6 'b-' Financial flexibility 4 or worse 'a+' Financial flexibility combined with a management and governance 5 or 6, combined with a 5, respectively 'bb' Weak or uncertain willingness to meet obligation or vulnerability to nonpayment True 'CCC'/'CC' rating criteria B. Enterprise Risk Profile 36. The enterprise risk profile consists of four factors: industry risk, economic fundamentals, market position, and management and governance. We score each of these factors on a '1' to '6' scale, with '1' being the strongest and '6' the weakest. The final enterprise risk score is the rounded weighted average of the four scores as follows: Industry risk score, 25%; Economic fundamentals score, 20%; Market position score, 35%; and Management and governance score, 20%. 37. The industry risk factor, weighted at 25%, reflects our opinion of the risk of the mass transit industry when compared to all other industries that we analyze, including its cyclicality, competitive risk, and regulatory policies. 38. The economic fundamentals factor addresses population and employment growth and receives slightly less

weight (20%) due to the enduring demand for mass transit through economic cycles in most countries. In fact, mass transit demand often increases with economic downturns. Nevertheless, extreme economic stress can result in rapid outmigration or significantly reduced employment, leading to reduced ridership. In other situations, economic stress can lead to budget stress for a mass transit system, and one tool management may use to reduce costs could be a reduction in service, which also reduces ridership. 39. Market position, which includes a measure of ridership, receives a weighting higher than other factors (35%), because market position directly influences demand for mass transit. 40. Management and governance (weighted at 20%) includes our assessment of strategic planning, risk management and operational standards, management expertise, depth and breadth, and internal controls. 1. Industry risk 41. Industry risk is one important factor that S&P; Global Ratings evaluates in determining a rating for a company or not-for-profit enterprise, such as a mass transit system. We view industry risk as the impact of an industry's characteristics on a specific entity within that industry. The identification and analysis of an industry's opportunities and risk characteristics is the first step in developing a robust understanding of industry participants' external operating environment. 42. The industry risk score results from a combination of assessments of: Industry cyclicality, which measures the degree of revenue and earnings volatility observed during cyclical downturns; and Industry competitive risk and growth environment, which is based on the degree of the effectiveness of barriers to entry, levels and trends of profitability, substitution risk, and growth trends observed in the industry. Table 3 Industry Risk Scores SCORE INDUSTRY RISK SCORE DESCRIPTION 1 Very low risk 2 Low risk 3 Intermediate risk 4 High risk 5 Very high risk 6 Extremely high risk 43. Our industry risk score for the mass transit sector overall is '1', or "very low" (see table 3), the lowest level possible. The mass transit industry is mature and has historically demonstrated only minor cyclicality (including ridership trends) and therefore we characterize the cyclicality and volatility of operating earnings as low risk. We also characterize competition and the threat of substitute products or services as very low risk. Barriers to entry for a mass transit system are very high given the size of these systems and their large infrastructure, but other forms of transportation are an option for most riders. Other forms of transportation generally cannot compete on price and, in many cases, convenience or speed. Given the extent to which fares are subsidized, volatility in ridership during economic cycles is low, and generally not sensitive to income levels. Finally, ongoing government subsidies, other support, and oversight generally limit volatility, with the overall high essentiality of the service delivered limiting the potential for negative government intervention, or reduced funding. 44. Although the norm is that industry risk is sector-specific, in some cases policy, financial, or budget issues at the government-owner level could significantly increase it. For example, a government owner under fiscal or political pressure might decide not to increase tariffs despite continuing losses, or set a weak subsidy framework and force the company to follow an aggressive investment policy. We may increase (weaken) the industry risk score by up to two points (it can never be worse than '3', or 'intermediate', in table 3) if we observe or anticipate that policies related to the government owner are likely to erode the mass transit system's competitive position or increase its revenue cyclicality on an ongoing basis. 2. Economic fundamentals 45. To determine the stability and sustainability of demand for public transportation, the methodology assesses the economic fundamentals within the transport system's catchment area. More stable or growing population profiles and employment growth support strong and consistent demand for mass transit services. Conversely, sustained declines in population and declining employment directly reduce demand for mass transit. 46. Population growth is an important credit metric in that the greater the population in the catchment area, the greater the need for mass transit services. Population growth also drives employment growth, and, as both the population and level of employment grow, congestion on local roads and freeways increases (especially during peak hours), making travel by private autos or taxis more time consuming than mass transit alternatives such as rail, subway, or bus (especially for buses that can use high occupancy vehicle (HOV) lanes, if available). In many cases, riders have no viable transportation alternative, either due to logistics or financial considerations. 47. Equally important in determining the economic fundamentals initial score is employment growth, as it almost always directly influences ridership trends, even if population growth is flat. Table 4 details the manner in which historical five-year population and employment growth form the initial economic fundamentals score. For both population growth and employment growth, we calculate the historical change over the past

five years to smooth out year-to-year fluctuations and get a better sense of the long-term trend. 48. We have observed that for mass transit, income is less a predictor of demand than it is for other public finance sectors such as public utilities (ability to afford water or electric rates, and rate increases) or the tax-backed sector (ability to pay property taxes). Given the degree of subsidization of mass transit systems, fares are generally affordable for most of the population, regardless of per capita income levels, and we have seen that fare increases do not result in a sustained or significant decline in ridership or demand in most cases. Nonetheless, at some level, we do believe per capita income levels that are significantly (30%) above or below the national average result in enhanced or reduced flexibility, respectively, to increase fares. Therefore, we have included those special cases as either a positive or negative adjustment factor, respectively. While we do recognize that there are other factors that influence the demand for mass transit, including prevailing gas prices and convenience of use, in our view, these secondary factors are already inherent in the demand for mass transit and thus are not additional adjustment factors. 49. In the determination of the final economic fundamentals score, the presence of additional factors may result in an adjustment to the initial score suggested by population and employment trends. Adjustments are cumulative, but limited to a maximum of two points. 50. The positive adjustments improving the initial score by one point each, are: Projections for the current year and the following year suggest a better initial score. Per capita incomes are 30% or more above the national average. 51. The negative adjustments worsening the initial score by one point each, are: Projections for the current year and the following year suggest a worse initial score. Per capita incomes are 30% or more below the national average. Systems that have a low population base of less than 100,000 people. In our view, this limits demand and employment diversity and also creates the potential for event or concentration risk. Systems where a single employment sector or single employer represents more than 30% of total employment, creating an above-average reliance on that concentrated sector or employer. In our view, this concentration puts the mass transit system at risk of a significant decline in employment and, in turn ridership, if that sector or employer were to experience a contraction. Table 4 Assessment Of Economic Fundamentals CHANGE IN EMPLOYMENT OVER LAST FIVE YEARS 3% OR MORE 0% TO 2.99% -3% TO -0.01% BELOW -3% CHANGE IN POPULATION IN CATCHMENT AREA OVER LAST FIVE YEARS 3% or more 1 1 2 3 0% to 2.99% 1 2 3 4 -3% to -0.01% 2 3 4 5 Below -3% 3 4 5 6 QUALITATIVE FACTORS POSITIVELY AFFECTING THE INITIAL SCORE QUALITATIVE FACTORS NEGATIVELY AFFECTING THE INITIAL SCORE -Projections for the current year and the following year suggest a better initial score. -Per capita income 30% or more above the national average. -Projections for the current year and the following year suggest a worse initial score. -Per capita income 30% or more below the national average. -Very low population in catchment area (below 100,000) leading to potential event risk. -Very high sector or top employer concentration in catchment area at more than 30% of total employment. The economic fundamentals score equals the initial score adjusted up or down for each qualitative factor, except that the final score may be no more than two points away from the initial score. 3. Market position 52. A mass transit system's market position can result in different degrees of vulnerability to industry and economic trends. A growing customer base leaves the mass transit system better able to handle negative shocks, as does a less-competitive environment. Accordingly, the ridership trends and the degree of competition together determine the initial score for market position, as seen in table 5. We measure the five-year cumulative change in ridership to smooth out any short-term fluctuations to get a better sense of the long-term trend. 53. For the degree of competition, we make distinctions between monopoly positions, oligopolies, and situations open to broader (or perfect) competition. Almost all mass transit systems have a favorable, monopolistic position. An oligopoly type system is one where the primary mass transit provider has a relatively low market share, or where a small degree of competition (two or three competitors or other popular means of transport) exists. Finally, we define a competitive market as one in which there are several competing mass transportation providers – although this is a scenario that rarely exists due to the extensive infrastructure involved. If market share is over 80%, we classify this entity as a monopoly even though there might be some competing transit services provided by other smaller organizations. Given the extensive infrastructure and capital investment required for another provider to meaningfully compete, it is unlikely that provider could materially erode the monopolistic status of the main mass transit system. 54. In the determination of the

final market position score, the presence of additional factors may result in an adjustment to the initial score suggested by ridership trends and the degree of competition. Adjustments are cumulative, but limited to a maximum of two points. 55. The positive adjustments improving the initial score by one point each, are: Projections for the current year and the following year suggest a better initial score. The mass transit system is not a monopoly, but has long-term (three to five years) rights to a quasi-monopoly position under the government's framework (thus increasing probability of continuity). 56. The negative adjustments worsening the initial score by one point each, are: Projections for the current year and the following year suggest a worse initial score. The transit system is involved with subsidiaries that are in unrelated or relatively more volatile activities or industries that represent more than 25% of combined operating and nonoperating revenues. Table 5 Assessment Of Market Position DEGREE OF COMPETITION CHANGE IN RIDERSHIP OVER LAST FIVE YEARS (%) MONOPOLY-LIKE (VIRTUALLY NO COMPETITION) OLIGOPOLY (LIMITED COMPETITION) COMPETITIVE (FULL COMPETITION) Above 3% 1 2 3 1.5% to 3% 2 3 4 -1% to 1.49% 3 4 5 Below -1% 4 5 6 QUALITATIVE FACTORS POSITIVELY AFFECTING THE INITIAL SCORE QUALITATIVE FACTORS NEGATIVELY AFFECTING THE INITIAL SCORE -Projections for the current year and the following year suggest a better initial score. -Very stable and predictable long-term (3-5 years) assignment of quasi-monopoly rights under government framework (if not a monopoly). -Projections for the current year and the following year suggest a worse initial score. -The transit system is involved with subsidiaries that are in unrelated or relatively more volatile activities or industries that represent more than 25% of combined operating and nonoperating revenues. The market position score equals the initial score adjusted up or down for each qualitative factor, with a maximum combined adjustment of two points. 4. Management and governance 57. The analysis of management and governance is one of the most qualitative aspects of our rating methodology. This section of the mass transit criteria will use our criteria, "Management And Governance Credit Factors For Corporate Entities And Insurers," published Nov. 13, 2012. In referring to these criteria, various paragraphs that pertain to insurers do not apply. In addition, when referring to that criteria, the words "mass transit system" or "mass transit systems" should be substituted for the words "company" or "companies," respectively (to allow for that criteria to also apply to public transit systems). 58. The term "management and governance" encompasses the broad range of oversight and direction conducted by a mass transit system's board representatives, executives, and functional managers. Their strategic competence, operational effectiveness, and ability to manage risks shape a mass transit system's competitiveness in the marketplace and credit profile. If a mass transit system has the ability to manage important strategic and operating risks, then its management plays a positive role in determining its operational success. Alternatively, a weak management with a flawed operating strategy or an inability to execute its business plan effectively is likely to substantially weaken a mass transit system's credit profile. The assessment of management and governance considers several elements. These include: Management, which includes strategic positioning, risk and financial management, and organization effectiveness; and Governance. 59. Table 6 describes the scoring methodology for mass transit entities. Table 6 Scoring Of Management And Governance SCORE RELATED SUBFACTORS Strong (1) At least five of the eight strategic positioning, risk management, and organizational effectiveness subfactor scores are positive, and none is negative, and there are no negative scores for governance. Satisfactory (2) At least three of the eight strategic positioning, risk management, and organizational effectiveness subfactor scores are positive, and none is negative, and there are no negative scores for governance. Fair (3) Combinations not covered by other descriptors--or--any negative score for a governance subfactor. Weak (4) Five or more of the eight strategic positioning, risk management, and organizational effectiveness subfactor scores are negative--or--key aspects of management are potentially harmful to the company's risk profile--or—any governance deficiencies are considered severe. 60. As depicted in table 6, one or more negative governance subfactor scores will constrain the overall management and governance score to no higher than 'fair', regardless of the actual tally of subfactor scores. A score of 'negative' for any subfactor indicates that there is a material deficiency in the management or governance of a mass transit system. If we view a specific subfactor or group of subfactors as potentially harmful to the mass transit system's risk profile, we will score management and governance as 'weak'. For example, management and governance will be 'weak' if a mass transit

system's management has a history of experiencing unusual items that regularly affect its financial performance to the point of being harmful to its risk profile. Management and governance will score no higher than 'fair' if we have scored one or more governance subfactors as 'negative', and 'weak' if there are deficiencies in governance that we consider severe. 61. Given the 1 to 4 scale for management and governance per the "Management And Governance Credit Factors For Corporate Entities And Insurers" criteria, we employ the matrix in table 7 to convert the score to a 1 to 6 scale, to be consistent with the design of mass transit criteria. A management and governance score of '1' converts to a score of '1', a management and governance score of '2' converts to a score of '2' or '3', a management and governance score of '3' converts to a score '4' or '5', and a management and governance score of '4' converts to a score of '6'. In cases where the converted score presents two choices, the choice between the two scores is based on our view of future performance of the factors composing management and governance. 62. We could lower the converted management and governance score by up to two categories if a government owner that controls a company allows a deterioration of the financial risk profile of the company to "vulnerable" or "highly vulnerable" (as defined in table 1), and the government has not launched or, in our view, is not likely to launch a credible plan to restructure its financial profile. Table 7 Management And Governance Score SCORE CONVERTED SCORE 1 (Strong) 1 2 (Satisfactory) 2 or 3 3 (Fair) 4 or 5 4 (Weak) 6 C. Financial Risk Profile 63. Five factors comprise the financial risk score: financial policies; debt service coverage; liquidity; financial flexibility; and debt burden. We score each of these factors from '1' (the strongest) to '6' (the weakest). The final financial risk score results from a rounded weighted average of the five scores. The weightings are as follows: Financial policies score, 10%; Debt service coverage score, 20%; Liquidity score, 25% Financial flexibility score, 30%; and Debt burden score, 15%. 64. When performing the financial analysis, S&P; Global Ratings evaluates, in general, at least three years of historical audited or official financial statements, as well as the current year's budget and multiyear financial plans or forecasts (if available) provided by management of the mass transit system. We may complement this evaluation with our internally-generated forecast or sensitivity analyses. 65. The scoring for each factor within the financial risk profile is based on the most recently completed fiscal year, sometimes referred to as the base year. Our preference is to use audited financial statements from the base year to determine the scoring for each factor. However, if audited financial statements for the most recent fiscal year are not yet available, we will use estimated or unaudited financial results provided by management, at our discretion, to the extent we believe the data is accurate and reliable. 66. Financial reporting, practices, and results can vary from year to year, and across states or countries, or even among systems in the same state or country. S&P; Global Ratings often makes analytic adjustments to data in order to better align the data with our view of the ongoing operational reality of a particular transit system, and to improve the comparability of the financial results across systems. Our analysts may also employ adjustments to portray what we view as a more accurate depiction of recurring activity. Certain data adjustments are fairly standard, such as the smoothing of one-time major capital projects that distort a particular year's operating result, or adjusting for other one-time revenue and expenditures, where we would typically subtract large one-time revenue receipts or expenditures from revenues and expenditures. Examples of amounts that would typically be adjusted include the win/loss of legal judgments, or sale/purchase of an asset. These data adjustments, whether related to revenues, expenses or annual debt service, are particularly important in the calculation of debt service coverage. 1. Financial policies 67. The analysis of financial policies includes four main areas: Transparency and disclosure policies; Reserve and liquidity policies; Long-term planning polices; and Debt management policies. 68. Table 8 details the attributes of each component associated with financial policies scores of '1', '3', and '5'. A mass transit system does not need to display all of the attributes associated with a given score, but should display a preponderance. A score of '2' results from a roughly equal mix of attributes in the '1' and '3' categories, while a score of '4' results from a roughly equal mix of attributes in the '3' and '5' categories. The final financial policies score results from the rounded average of the four components, with each component receiving equal weight. A score of '6' results from an extremely weak financial or credit culture such that all or most of the above descriptors are weaker than a score of '5'. Table 8 Assessment Of Financial Policies SCORE DEFINITIONS ELEMENTS 1 3 5 Transparency and disclosure policies Timely and detailed financial reports on all operating segments exist and are

published several times a year. Reports use accrual-based accounting concepts and include both consolidated and segment-level reporting, if applicable. No material audit findings or qualifications exist. The effective and integrated use of accounting and reporting software provides data as needed on short notice for information and control purposes. Mass transit system publishes comprehensive reports. Both accrual and cash-based elements may exist. The report is independently audited, and only minor qualifications exist. Data for reporting and control analysis exists periodically, but requires significant resources to generate. Financial reporting is basic and incomplete. It may be communicated with material delays. Accounting standards are limited or unclear. An audit either does not exist or has significant findings. Reserve and liquidity policies A well-defined, formal operating reserve policy exists. The policy links reserve levels to cash flow needs. Management has historically adhered to the policy and is expected to continue to do so. Cash and debt management functions are centralized and integrated. A reserve policy exists, but it may be less formal or the level has less connection to the transit system's unique characteristics. The transit system has historically adhered to the policy. Cash management is less centralized and may not be integrated with debt management. No reserve or liquidity policies exist, or if they do, they are not followed. Cash management is highly decentralized. Long term planning policies Multiyear financial and capital plans exist where future issues are identified along with possible solutions. Well-documented and realistic assumptions support the plans, and the plans are used for drawing up budgets to support a strong commitment to financial discipline. Multiyear projections are done only informally that lack detail on assumptions and implications. Some assumptions may be optimistic, but are recognized as such. There is an absence of medium-term financial planning, reflecting a short-term approach. The financial strategy is aggressive and based on unrealistic assumptions without clear financial benchmarks. Debt management policies A debt management policy with well-prescribed debt limits exists. The policy dictates that long-term debt is used for capital expenditures and not operating costs. The policy is detailed, active, and risk-averse. If derivatives are allowed, detailed policies prudently limit their uses. A basic policy exists and includes provisions that long-term debt be used for capital expenditures and refinancing of long-term borrowings. Derivatives are only used for hedging purposes. No effective policies exist. The mass transit system uses long-term debt to cover liquidity needs and regularly breaches debt limits. Debt management is aggressive with derivatives used for speculative purposes. 69. The rigor of a mass transit system's financial policies is an important factor in our analysis of creditworthiness. Managerial decisions, policies, and practices apply directly to the system's financial position and operations, debt burden, and other key credit factors. A system's ability to implement timely and sound financial and operational decisions in response to economic and fiscal demands is a primary determinant of near-term changes in credit quality. 70. When analyzing a mass transit system's financial policies, we focus on policies related to transparency and disclosure, reserves and liquidity, long-term planning, and debt management. If a mass transit system is unable or unwilling to employ its authority in a timely manner to address events that impact its budget and financial condition, its credit rating can be adversely affected. 71. Transparency and disclosure policies are important in that accuracy and timeliness of financial statements and disclosure of key developments are evaluated by credit analysts, regulators, counterparties, and other key industry participants, and general public, to assess the financial condition and operations of the system. Policies with regard to targeted minimum levels of operating cash or liquidity are important in that they allow for contingency planning and designated funds for emergencies, and can provide a cushion for unexpected downturns. In addition, policies generally outlive management and survive turnover of key staff, helping to guide future management. Policies guiding long-term financial planning are also critical in that they help identify future issues or challenges, and possible solutions, and help guide key decisions on revenue generation or expenditure control. Finally, debt management policies can indicate the organization's debt parameters, and align financing tools used in managing the mass transit system's exposure to operating, financial, and economic risks. 72. To perform this analysis, S&P; Global Ratings relies on documentation provided by the enterprise and discussions with the organization's management. Relevant documents include, but are not limited to, audited financial statements and accompanying notes, budget documents, financial plans, management policy statements, procedure manuals, and periodic reports. 2. Debt service coverage, or EBITDA coverage 73. Debt service coverage (DSC), also known as EBITDA coverage,

measures near-term capacity to service debt (principal and interest) from recurring net revenues, or recurring operations. Essentially, it measures the ongoing ability to pay annual debt service given current and evolving revenue and expense positions. 74. Table 9 details the manner in which debt service coverage forms the DSC initial score. Because nearly all transit systems rely on some form of ongoing government subsidy or nonoperating revenues such as sales taxes (whether or not specifically pledged to repay debt), we include such operating subsidies or nonoperating revenues in the calculation of net revenues available for debt service (see Glossary) to obtain a more accurate depiction of all revenues generally available for all debt service when calculating DSC. 75. S&P; Global Ratings analyzes the ability of mass transit systems to cover debt service with recurring revenues, without the use of carryover cash balances (or other one-time transfers in from other funds) or working capital from the current or prior fiscal year. While we understand that some mass transit systems budget those funds as available revenues for the fiscal year, we consider those cash balances as necessary liquidity for unexpected events, such as emergency capital spending, economic downturns, and other contingencies. 76. In calculating DSC, we generally exclude capital contributions (sometimes called contributed capital) as these funds typically represent capital grants received that are recognized when the project for which they were granted is completed. In some cases, state, local, or federal operating subsidies represent a portion of capital contributions. In those cases where the capital contributions are legally available for the payment of debt service, whether or not specifically pledged to repay debt, when we believe that the contributions are recurring and predictable in nature, we will include them in our DSC calculation. 77. We may complement our DSC analysis with the analysis of cash flow coverage, especially in cases where coverage on an accrual basis may be inadequate or misleading. If used, the same thresholds and analysis apply, per table 9. 78. Many mass transit systems operate on a break-even basis (total revenues and nonoperating revenues are equal to total operating costs and debt service; or, more simply, inflows are equal to outflows) to keep fares low, with surplus revenues or operating cash after capital spending at a minimum given these funds are often needed for system improvements or expansions (or capital funding is sourced from capital contributions that are not counted in our DSC calculation). Therefore, in some cases, DSC hovers around 1.0x, and declines to slightly below 1.0x in one year, and rises above 1.0x the following year. Nevertheless, we view DSC at just 1.0x as only marginally adequate and anything less than 1.0x as weak. A DSC score of '5' or '6' will typically apply in cases where we believe DSC of less than 1.0x has been or will be sustained for more than one year, as a result of structural imbalance, and there is no credible plan to rectify the situation. 79. For bonds issued by mass transit systems that are secured by a gross revenue pledge or a gross pledge of farebox revenues (or other gross pledges), we will calculate coverage on a gross basis to determine whether the enterprise is within covenanted DSC requirements, but in our analysis of DSC for purposes of the initial score we will discount gross revenue pledges and treat them as net revenue (i.e., net of operating expenses) pledges. We do this since, in our opinion, operating expenses must be paid in order for a system to be a viable, ongoing concern generating sufficient net revenues for debt service. It also allows for better comparability among systems, or among bonds issued by various systems. In the rare circumstance that a transit system neither has debt nor plans to issue debt in the current or next fiscal year, we assign the highest initial DSC score of '1' to address the issue of dividing by zero. 80. In the determination of the final DSC score, the presence of additional factors may result in an adjustment to the initial score. Adjustments are cumulative but limited to a maximum of two points. 81. The positive adjustments improving the initial score by one point each, are: Projections for the current year and the following year suggest a better initial score. The planned use of designated rate stabilization funds improves DSC to at least 1.0x, as long as we expect concurrent action to result in recurring net revenues providing at least 1.0x DSC. 82. The negative adjustments worsening the initial score by one point each are applied when: Projections for the current year and the following year suggest a worse initial score. Revenue variability is high as evidenced by at least one year in the past three years where operating revenues declined by more than 25% from the prior year without corrective action. Government subsidies are highly vulnerable to uncertain political decisions, have a recent history of significant delays or have been materially below budgeted levels, or other nonoperating revenues such as sales taxes have been subject to significant volatility. Mass transit systems that perform down to the level of permissive legal covenants, such as the aggressive use of

certain cash balances toward satisfying a rate covenant or additional bonds test (more typical for issue ratings in the U.S.) and potentially creating misalignment between revenues (including nonoperating revenues which reflect local, state, or federal support) and expenses. Cases where there has been a DSC covenant (also sometimes called a rate covenant) violation. Extremely high likelihood that the enterprise will need significant revenue growth to meet future obligations or risk having to refinance around a bullet maturity. Table 9 Assessment Of Debt Service Coverage (or EBITDA coverage) DEBT SERVICE COVERAGE INITIAL SCORE Greater than 2x 1 1.24x-1.99x 2 1.10-1.23x 3 1.0-1.09x 4 Less than 1x but not negative 5 Negative 6 QUALITATIVE FACTORS POSITIVELY AFFECTING THE INITIAL SCORE QUALITATIVE FACTORS NEGATIVELY AFFECTING THE INITIAL SCORE -Projections for the current year and the following year suggest a better initial score. -The planned use of designated rate stabilization funds improves the DSC to at least 1.0x, as long as we expect concurrent action to result in recurring net revenues providing at least 1.0x. -Projections for the current year and the following year suggest a worse initial score. -Revenue variability is high as evidenced by at least one year in the past three years where operating revenues declined by more than 25% from the prior year without corrective action. -Government subsidies are highly vulnerable to uncertain political decisions, have a recent history of significant delays or have been materially below budgeted levels, or other nonoperating revenues such as sales taxes have been subject to significant volatility. -Systems that perform down to the level of permissive legal covenants, such as the use of certain cash balances toward satisfying a rate covenant or additional bonds test (more typical for issue ratings in the U.S.) and potentially creating misalignment between revenues (including nonoperating revenues which reflect local, state or federal support) and expenses. -Cases where there has been a DSC covenant (also sometimes called a rate covenant) violation. -Extremely high likelihood that the enterprise will need significant revenue growth to meet future obligations or risk having to refinance around a bullet maturity. The DSC score equals the initial score adjusted up or down for each qualitative factor, except that the final score may be no more than two points away from the initial score. 3. Liquidity 83. While the DSC score measures the ongoing ability to generate funds to pay debt service, the liquidity score measures the immediate capability to service existing obligations. More specifically, the liquidity score measures the ability to fund current obligations from unrestricted funds on hand, bank lines or loans, and capital markets. 84. While internal liquidity is important, we also understand that maintenance of high levels of unrestricted cash is not common in the mass transit sector. Many mass transit systems, however, have access to external liquidity via committed lines of credit or the issuance of debt in capital markets. In addition, in most cases the systems are able to adjust service levels to reduce costs, if needed, which boosts (albeit with a lag) net internal resources to pay debt service. 85. Table 10 details the manner in which operating days of available unrestricted cash and total cash to debt service for the base year are combined to form the initial liquidity score. When considering cash in these measures, we also include the undrawn amounts of any committed bank lines and ongoing liquidity lines from a related government that can be immediately tapped, and drawn amounts are included with debt service and total outstanding debt. If a debt service reserve fund (DSRF) exists, the amount is included in the cash to debt service measure but not in the days' cash measure because these funds are generally restricted for the payment of debt service. In the rare circumstance that a transit system neither has debt nor plans to issue debt in the current or next fiscal year, we assign the highest cash to debt service score of '1' (as one component of liquidity) to address the issue of dividing by zero. 86. In cases where there is a significant amount of volatility in capital expenditures from year to year, to better assess available liquidity to cover all obligations we may employ the use of a sources versus uses of cash analysis as a complementary approach in evaluating liquidity. Table 10 Assessment Of Liquidity CASH TO DEBT SERVICE (INCLUDING DSRF AND LINES) DAYS OF AVAILABLE CASH (INCLUDING LINES, EXCLUDING DSRF, WHICH IS RESTRICTED) MORE THAN 8.0X 5.0X TO 8.0X 2.0X TO 4.99X LESS THAN 2.0X More than 180 days 1 1 2 2 90-180 days 2 2 2 3 30-89 days 3 4 4 5 20-29 days 4 5 5 6 Less than 20 days 5 5 6 6 QUALITATIVE FACTORS POSITIVELY AFFECTING THE INITIAL SCORE QUALITATIVE FACTORS NEGATIVELY AFFECTING THE INITIAL SCORE -Projections for the current year and the following year suggest a better initial score. -If access to external liquidity is exceptional, as defined in table 11, the score is improved by two points; if strong, the score is improved by one point. -Projections for the current year and the following year suggest a worse

initial score. -If access to external liquidity is limited or uncertain (see table 11) and days' cash is less than 180 days, the score worsens by one point; if access to liquidity is uncertain and cash to debt service is less than one, the score worsens by two points. -Aggressive use of investments as evidenced by short-term equity and other high-yield assets. -Cash flow volatile and unpredictable at times, or fiscal year-end liquidity is skewed by seasonality or is otherwise not indicative of actual daily working capital levels. -High refinancing risk over the next two to three years. -Exposure to contingent liabilities likely payable within 12 months. The liquidity score equals the initial score adjusted up or down for each qualitative factor, except that the final score may be no more than two points away from the initial score. If there is uncertain access to capital markets or other forms of external liqudity, yet such access is necessary for the mass transit system to meet or refinance an obligation due within a year to maintain regular operations or to fund a critical capital project, the liquidity score is capped at '6'. 87. Once the initial score is determined, the presence of additional factors may result in an adjustment to the initial score by up to two points. 88. One notch positive adjustment is applied in cases where: Projections for the current year and the following year suggest a better initial score. There is exceptional or strong access to external liquidity, as determined by table 11. If access to external liquidity is exceptional, the initial score improves (is lowered) by two points. If access to exceptional liquidity is strong, the score improves (is lowered) by one point. 89. Negative adjustments are applied in cases where: Projections for the current year and the following year suggest a worse initial score. Access to external liquidity is limited or uncertain (see table 11) and days of available cash is less than 180 days, the score worsens by one point; if access to liquidity is uncertain and cash to debt service is less than one, the score worsens by two points. Aggressive use of investments evidenced by short-term equity and other high-yield assets. Volatile and unpredictable cash flows, or fiscal year-end liquidity is skewed by seasonality or is otherwise not indicative of actual daily working capital levels. Potential liquidity pressure from high refinancing risk over the next two to three years. Exposure to contingent liabilities likely payable within 12 months. 90. If there is uncertain access to capital markets or other sources of external liquidity (see table 11), yet such access is necessary for the mass transit system to meet or refinance an obligation due within a year to maintain regular operations (see "Bond Anticipation Note Rating Methodology," published Aug. 31, 2011), or to fund a critical capital project, the liquidity score is capped at '6'. 91. With regard to exposure to contingent liabilities, this is a risk that is sometimes formalized by an explicit guarantee to provide support, but it can also be an implicit risk derived from the enterprise's moral obligation to provide support. The risk from such relationships depends on the supported entity's credit quality and the relative size of its debt compared with the size of the enterprise's budget. Enterprises also increasingly face a variety of litigation. When these risks are not covered in the budget through a provision or budget allocation, they also represent a contingent liability. It is very difficult to assess such potential liabilities as they hinge on court decisions. As a result, the assessment typically involves thorough discussions with the enterprise's senior management and progressions of the court proceedings. For more information, see "Contingent Liquidity Risks In U.S. Public Finance Instruments: Methodology and Assumptions," published March 5, 2012. 92. External liquidity.Market funding--bank loans, bonds, and commercial paper--can be an important source of enterprise financing, particularly in countries with liquid and mature bank or capital markets. In some countries, enterprises rely largely on a well-developed capital market for their funding, while in most other countries, public finance entities rely mostly on bank loans. 93. Consequently, we analyze the liquidity position of a mass transit system in the context of both country-specific and individual characteristics that affect its access to external liquidity and therefore its refinancing capacity and risk. The analysis includes: The legal framework defining the mass transit system's access to liquidity; The general strength and diversity of domestic banks, focusing particularly on active lenders to the public sector; The development of the domestic bond market in general and for transit enterprises in particular; and An individual mass transit system's track record of market access or links with a diversified pool of banks. 94. Based on the above considerations, we classify a system's access to external liquidity in five categories, outlined in table 11. We then use these classifications as qualitative adjustments as detailed in table 10. Table 11 Assessment Of Access To External Liquidity ACCESS TO EXTERNAL LIQUIDITY TYPICAL CHARACTERISTICS Exceptional Well-tested access to capital markets through different capital financing programs and a history of tapping these markets for over 15

years and through different economic cycles. Strong Proven record of sufficient access to deep and liquid capital markets at all times, including periods of severe economic stress such as 2008 and 2009 and access to a diversified pool of domestic and international banks. Satisfactory Limited record of access to the capital markets, but access to a relatively diversified pool of domestic and international banks. Limited Possible legal restrictions on the use of debt instruments for liquidity management; developing domestic capital markets and a limited number of domestic and international banks which lend to this market. Uncertain Possible legal restrictions on the use of debt instruments for liquidity management; limited development of domestic capital markets and an extremely limited number of domestic and international banks which lend to this sector. 4. Financial flexibility 95. The financial flexibility score measures the ability to adjust revenue and expense patterns to generate additional funds on a more immediate basis. 96. Table 12 details the manner in which the farebox recovery ratio (FRR) and the debt service carrying charge combine to form the initial score. We calculate the FRR by taking farebox revenues and dividing by operating costs that are net of depreciation and amortization. Many systems have a mandated FRR that must be maintained each year to allow the system to be eligible for grant funding or other subsidies. Systems that cover a higher portion of their total operating costs through internally generated revenues such as passenger revenues or farebox revenues rather than through sales taxes, local, state, and federal government subsidies or grants usually enjoy a larger amount of control and are more likely to be able to cover a financial imbalance through a fare adjustment. 97. The FRR is an important ratio because fares are likely the only source of short-term revenue flexibility (but fare increases may take some time to implement and realize) given that most transit systems have fare-raising autonomy, and the relatively longer lead time and challenge in increasing subsidies such as local or state-shared sales taxes, or grants. Many of these aforementioned subsidies are also formula-driven on the basis of population, leaving little direct control by management. Most mass transit systems also benefit from the ability to adjust services at any time, which provides an immediate positive financial impact given the degree to which fares are subsidized. 98. Our base case assumes flexibility on farebox revenue (fares) and the ability to adjust services (such as routes), and, to the extent these conditions are not present, a negative adjustment for each (score rises by one or two points) is made. 99. The second component of the financial flexibility score is a mass transit system's debt service as a percentage of all financial obligations due during the fiscal year, including both operating costs and debt service. We include this ratio in our assessment of the financial flexibility score and not in the assessment of the debt burden score as our objective is to assess what portion of total annual expenditure obligations are fixed debt service payments as opposed to other, more discretionary expenses such as labor, operating, or maintenance costs that are more easily scaled back, if necessary. For example, a mass transit system whose debt service costs are just 5% of its overall obligations (debt service plus operating expenses) might be in a better position to pay debt service in full and on time (which is critical to credit quality) and instead cut labor, services, and other costs, than would a transit system whose debt service comprises 25% of overall obligations. Table 12 Assessment Of Financial Flexibility DEBT SERVICE CARRYING CHARGE Farebox Recovery Ratio (FRR) Less than 6% 6%-10% 11%-20% More than 20% More than 55% 1 1 2 2 41%-55% 2 2 3 3 31%-40% 3 3 4 4 20%-30% 4 4 5 5 Less than 20% 5 5 6 6 QUALITATIVE FACTOR POSITIVELY AFFECTING THE INITIAL SCORE QUALITATIVE FACTORS NEGATIVELY AFFECTING THE INITIAL SCORE -Projections for the current year and the following year suggest a better initial score. -Projections for the current year and the following year suggest a worse initial score. -Limited ability or flexibility to adjust services and/or operating costs. -Fare increases have been challenging or challenged historically; fares considered high and otherwise difficult to raise. -Up to a two-notch negative adjustment for debt service carrying charge of more than 50%*. The financial flexibility score equals the initial score adjusted up or down for each qualitative factor, except that the final score may be no more than two points away from the initial score. *An exception to the two-notch adjustment limitation from the initial score exists in cases where the debt service carrying charge is disproportionately larger than 50%. 100. Once the initial score is determined, the presence of additional factors may result in an adjustment to the initial score of up to two points. An exception to the two-notch adjustment limitation exists in cases where the debt service carrying charge is disproportionately larger than 50%. 101. A positive adjustment improving the initial score by one point is made in cases where:

Projections for the current year and the following year suggest a better initial score, such as cases where management has indicated plans to redeem debt such that the carrying charge is likely to decrease materially. 102. Each negative adjustment worsens the initial score by one point each, except the debt service carrying charge adjustment, which can worsen the initial score by two points or more. We apply negative adjustments in cases where: Projections for the current year and the following year suggest a worse initial score, such as cases where management has indicated plans to issue debt such that the carrying charge is likely to increase materially. There is limited ability or flexibility to adjust service and/or operating costs. Fare increases have been challenging or challenged historically, or fares are considered to be high or otherwise difficult to raise. The debt service carrying charge is more than 50% (two-notch adjustment on its own). In addition, an exception to the two-notch adjustment limitation from the initial score exists in cases where the debt service carrying charge is disproportionately larger than 50%. 5. Debt burden 103. The debt burden score assesses the nature of long-term obligations facing the mass transit system. Table 13 details the manner in which debt to total revenues and debt to net revenues are combined to form the initial score. Debt to revenues measures the amount of debt relative to overall revenues, including government subsidies and other nonoperating revenues such as sales taxes, if applicable. Debt to net revenues considers the debt burden relative to only the net operating flows available to service debt. Table 13 Assessment Of Debt Burden DEBT TO NET REVENUES DEBT TO TOTAL REVENUES 0.0-2.0 TIMES (X) ABOVE 2.0X NEGATIVE NET REVENUES Less than 0.5 times (x) 1 2 4 0.5x to 1.0x 2 3 5 1.01x to 2.0x 3 4 6 More than 2.0x 4 5 6 QUALITATIVE FACTORS POSITIVELY AFFECTING THE INITIAL SCORE QUALITATIVE FACTORS NEGATIVELY AFFECTING THE INITIAL SCORE -Projections for the current year and the following year suggest a better initial score. -Low levels of nondiscretionary capital funding versus peers, thereby allowing some flexibility to scale back future debt needs. -An existing debt profile that amortizes more rapidly than that of peers. -Fully funded pension liability with financial projections indicating continued funding at that same level; and a below-average OPEB liability relative to peers, with demonstrated plans to fund the liability at the same or higher level. -Projections for the current year and the following year suggest a worse initial score. -High levels of nondiscretionary capital funding required or anticipated. -Inconsistent or inadequate pension funding in terms of the annual required contribution. OPEB risk assessment: Above-average liability relative to peers in the same country, with no clear plan to fund the obligation beyond current annual outlay requiremen requirements or no ability to reduce benefits. Pension funded ratio less than 50%. -More than 50% of debt is exposed to interest-rate changes or interest rates fixed for less than one year. The debt burden score equals the initial score adjusted up or down for each qualitative factor, except that the final score may be no more than two points away from the initial score. 104. Once the initial score is determined, the presence of additional factors may result in an adjustment to the initial score up to two points. 105. We apply the positive adjustment of one point each, when: Projections for the current year and the following year suggest a better initial score. Mass transit systems have low levels of nondiscretionary capital spending needs versus peers, thereby allowing some flexibility to scale back future debt needs. There is a relatively rapid amortization of long-term debt versus that of peers. There is a fully funded pension liability with financial projections indicating continued funding at that same level; and there is a below-average other postemployment benefit (OPEB) liability relative to peers, with demonstrated plans to fund the liability at the same or higher level. 106. We apply the negative adjustment of one point each, when: Projections for the current year and the following year suggest a worse initial score. There are high levels of nondiscretionary capital funding required or anticipated. There are significantly unfunded pensions where the system is only funding current claims; above-average OPEB obligations with no ability to reduce benefits and no concrete plan to fund the liability. More than 50% of debt is exposed to interest-rate changes or when interest rates are fixed for less than one year. D. Revenue Bond Covenant And Payment Provisions Considered For Issue Ratings 107. In the U.S., mass transit systems often issue revenue debt secured by specified revenues of the system, such as a gross pledge of farebox revenues or pledge of all operating revenues, an unconditional claim on the system as a whole, or a net revenue pledge (gross revenues less operating and maintenance costs). In cases where this revenue pledge consists of all or the main operating revenues of the system (gross pledge), rather than a net revenue pledge, debt service coverage is calculated on a net revenue basis. This is

the case because, in our opinion, a mass transit system could not continue to function and to pay debt service without the continued availability of such revenues to pay operating costs. 108. The issue rating on the senior-lien debt and the mass transit system's ICR may not always be the same, largely due to bond provisions that may, in our view, enhance or degrade credit quality. In addition, if an issuer's bond provisions have established additional inferior liens (for example, subordinate- or junior-lien debt), those liens are notched downward from the system's senior-lien debt rating unless it is determined that bondholders of the inferior position are not materially disadvantaged. In making the decision to notch, we will take into consideration: The status of each lien, meaning if additional parity debt is permitted to be issued against that lien, as opposed to whether supplemental covenants have been created that prohibit additional debt and have closed that lien; and The relative amount and tenor of debt outstanding by lien. Large amounts of outstanding principal on the prior lien, for example, could be a material impediment to subordinate-lien bondholders in a situation of extraordinary distress. 109. Payment provisions and covenants are widely used in U.S. public finance mass transit system revenue obligation transactions to set forth the specifics of a given issue and to provide certain protections to the investor given the often limited nature of the pledged revenue. Although payment of debt service with a gross revenue pledge represents a prior claim on revenues from an ordinal perspective, ratings assigned do not reflect the payment order. The diversion of revenues for debt service could effectively shut down the entity if operations and maintenance went unpaid for more than a short time. Such an event could risk operations, including revenue collections, and the ability to continue to produce revenues for debt service. 110. The presence of a debt service reserve fund may not necessarily be a credit strength, just as in some cases the absence of a DSRF may not necessarily be a credit weakness. To determine whether we view a DSRF as critical to the SACP, we generally look to the historical and projected DSC in conjunction with the level of operating reserves maintained by the mass transit system each year. 111. In general, a springing DSRF does not represent a credit strength because such requirements place additional liquidity stress on the entity producing the revenues while financial performance is declining. Also, in cases where the DSRF is funded via a surety reserve fund, the rating on the DSRF provider should be equal to or above the SACP, and investment grade, to warrant the recognition of the additional liquidity provided by this fund. 112. Typically, DSRFs provide only liquidity rather than full credit protection because they provide only temporary, rather than sustained, protection against stresses. As such, rating differentials resulting from the presence of DSRFs in most cases are limited, except as noted above. It is not unusual for highly rated issuers to issue bonds without DSRFs as these issuers are the same ones who usually enjoy high DSC ratios or liquidity positions. 113. Although somewhat unusual for bonds issued by U.S. mass transit systems, the absence of a rate covenant or additional bonds test may be of greater concern than the absence of a DSRF. The rate covenant requires the obligor to set rates and charges (fares) at levels that either are or that we expect to be sufficient to cover debt service and operating expenses by a margin specified in the legal documents. Similarly, an additional bonds test specifies the conditions necessary for the obligor to issue additional parity or senior-lien debt. Typically, the test requires that historical or projected revenues available for debt service exceed projected annual debt service requirements for existing and proposed bonds by a specified ratio. 114. For more information on revenue bond provisions, see "Methodology: Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations," published Nov. 29, 2011. VI. RELATED CRITERIA AND RESEARCH Related Criteria Assigning Issue Credit Ratings Of Operating Entities, May 20, 2015 Rating Government-Related Entities: Methodology and Assumptions, March 25, 2015 Corporate Methodology, Nov. 19, 2013 , Nov. 19, 2013 Methodology: Industry Risk, Nov. 19, 2013 Ratings Above The Sovereign -- Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013 Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012 Criteria For Assigning ‘CCC+’, ‘CCC’, ‘CCC-‘ And ‘CC’ Ratings, Oct. 1, 2012 Contingent Liquidity Risks In U.S. Public Finance Instruments: Methodology and Assumptions, March 5, 2012 Methodology: Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations, Nov. 29, 2011 Bond Anticipation Note Rating Methodology, Aug. 31, 2011 Principles Of Credit Ratings, Feb. 16, 2011 Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010 Credit Stability Criteria, May 3, 2010 Understanding S&P; Global Ratings' Rating

Definitions, June 3, 2009 Related Research The Time Dimension Of Standard & Poor's Credit Ratings, Sept. 22, 2010 These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.