FitchRatings

Peer Review of U.S. Managed Lanes

Attribute Assessments, Metrics and Ratings

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Related Research

Fitch Ratings 2021 Outlook: U.S. Transportation Infrastructure (December 2020)

Peer Review of U.S. Toll Roads (Attribute Assessments, Metrics and Ratings) (October 2020)

Coronavirus Stress Tests: U.S. Toll Roads - Managed Lanes (Structural Protections Offset Steep Traffic Losses; Rating Pressure in Severe Downside Case) (July 2020)

Fitch Takes Rating Actions on U.S. Managed Lanes Amid Coronavirus Disruptions (March 2020)

The Effect of Automated Vehicles on Toll Roads (Automated Vehicles Are Likely Positive but Congestion Reliever Toll Roads Are Most Vulnerable) (February 2020)

Managed Lanes Driven to Strong Performance (December 2019)

Managed Lanes: A Framework for Prudent Pricing (An Analysis of the Risks Posed by Price Caps and Free Access Policies) (October 2018)

Applicable Criteria

Toll Roads, Bridges, and Tunnels Rating Criteria (June 2020)

Infrastructure and Project Finance Rating Criteria (March 2020)

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Inside **Page**

Overview 2
Performance Highlights 3
Conclusion 4
Appendix A: Key Rating Driver Assessments for Toll Roads, Bridges and Tunnels 6
Appendix B: Managed Lanes' Revenue Volume Risk Factors 8
Appendix C: Map of Fitch-Rated U.S. Managed Lanes 9
Appendix D: Managed Lanes Ratings, Attributes, and Volume Assessments 10
Appendix E: Managed Lane Configuration and Pricing Policies 11
Appendix F: Select Financial & Operating Data by Facility 13
Appendix G: Select Financial & Operating Data by Rating 14

Overview

The 2020 *Peer Review of U.S. Managed Lanes* (ML) provides an annual snapshot of Fitch Ratings' U.S. ML portfolio, including key rating drivers (KRDs) for each rated project.

ML projects discussed in this report are financed with debt primarily secured by ML net revenues. MLs are a subset of the toll road sector and are rated by Fitch under the Toll Roads, Bridges and Tunnels Rating Criteria (June 2020) with the ML-specific elements laid out in *Appendix B*. As part of its criteria, Fitch focuses on six KRD as described below. Together, they address the main qualitative and quantitative aspects of the operating and financial profiles for most projects and reflect an assessment of both past performance and future expectations. Among these, unique features of MLs are assessed as part of revenue risk factors under Revenue Risk – Volume, as set out in the *Appendix B* of the toll road criteria.

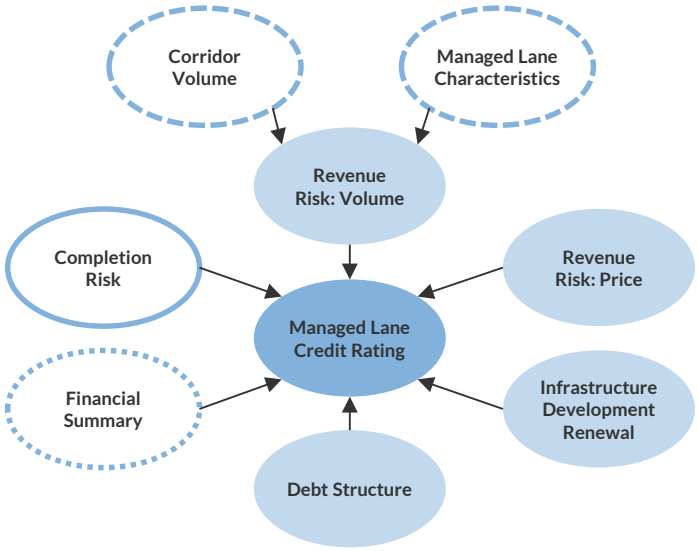
Key Rating Drivers Overview

Fitch's rating criteria identifies six KRDs applicable to ML ratings:

- Completion: Risk related to construction of the ML, if relevant.
- Volume: Traffic demand characteristics, firstly considering the volume characteristics of the corridor as a whole, including free access general-purpose lanes (GPLs). Separately, Fitch considers characteristics unique to the MLs, including historical demand, price elasticity of users, access policy and configuration.
- Price: The legal and political flexibility to increase tolls if required.
- Infrastructure Development/Renewal: The approach to maintaining and improving its infrastructure base.
- Debt Structure: Financial risk associated with the capital structure.
- Financial Summary: The level of financial cushion to deal with stresses.

For the first five KRDs, Fitch assigns an assessment of either stronger, midrange or weaker. The sixth KRD, financial summary, considers debt service coverage, leverage and liquidity in the context of the overall risk profile determined by review of the other KRDs.

Managed Lanes: Key Rating Drivers



Source: Fitch Ratings.

Comparability of Ratings

ML projects face unique challenges compared with standard toll roads, so a more diverse range of attributes is taken into consideration as part of Fitch's revenue risk analysis under the volume KRD described in detail in this report. This report also indicates the relative importance of the rating drivers, explaining conditions that may lead to one KRD outweighing others, resulting in a higher or lower rating than may otherwise be expected.

- KRD assessments help frame ML credit ratings, providing a standardized approach for comparing U.S. MLs and other infrastructure assets with Fitch's global portfolio.
- Particular emphasis is also placed on key features of the ML project's debt structure, including flexibility and liquidity, which are important given the inherent volatility and difficulty in forecasting. Most rated transactions benefit from structural flexibility providing added protection against weaker ramp-up.
- Most ML projects are rated in the 'BBB' category reflecting the leveraged structures employed. Given the relatively acute competition risks faced by ML facilities, it is highly unlikely that ratings above the 'A' category would be assigned, regardless of leverage or any other KRD assessments.
- Ratings below investment grade typically reflect projects with high completion risk, or those experiencing sustained underperformance and/or are significantly over leveraged.

Performance Highlights

Since the prior peer review, Fitch upgraded two credits, one was placed on Rating Outlook Positive, and two were placed on Rating Outlook Negative. The majority of credits were affirmed with a Stable Outlook. Revenue generation among operational facilities was strong in fiscal 2019 before the pandemic, with most facilities outperforming Fitch's rating and base case projections. The outperformance reflected a combination of strong traffic and revenue performance in a sound, overarching economic environment, solid pricing power as an asset class and a degree of conservatism in the development of Fitch's cash flow cases.

Sector Stability Despite Pandemic Impact

The sector's rating stability amid severe coronavirus-related traffic losses, averaging 60%–75% at their April peak, reflects a confluence of unique debt structure and other factors that provide meaningful and atypical bondholder protections. Many of these were designed several years ago when there were few operational MLs in existence, and therefore, there was a high degree of uncertainty about how MLs would ultimately perform.

As a result, debt structures included special provisions to protect against acute initial underperformance and a prolonged period of moderate underperformance. These features and other factors had the beneficial effect of cushioning the blow from the coronavirus pandemic, as well as protecting against a degree of economic underperformance in the years to come.

Rating stability to date, supported by the factors noted below, has led to no material changes to Fitch's analytical approach to the sector thus far. Future commentary will focus on the experience of the pandemic on MLs and whether some rating case assumptions may need to be modified in light of observed performance through a first-of-its-kind severe demand shock.

TIFIA Deferability

Most MLs' debt structures contain a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan. The majority of these loans contain deferability provisions in which unpaid scheduled debt service is accreted as long as mandatory debt service, which can be materially lower, is paid. This feature provides MLs a great deal of flexibility when facing a period of underperformance.

Interest Only/Accretion Mode

The debt for many MLs includes a post-opening period in which all or a portion of debt service is in interest-only mode or interest-accretion mode. Because most MLs are early in their operational phase, or they are under construction with capitalized interest, they benefited from the crisis hitting during a time in which the size of debt service due is significantly lower than it will be once full principal and interest payments are due.

Generally Strong Liquidity

The majority of MLs benefit from debt service reserve accounts large enough to cover 12 months of debt service. Additionally, some structures have ramp-up reserve accounts or limited governmental backstops that provide added layers of protection.

Capped Ratings Have Stronger Buffers

Some ML ratings exceeded financial thresholds that would typically result in a higher rating level, but were capped over concerns that additional leverage could erode financial metrics. This was more common among privately owned concessions where Fitch needs to see a history of high financial metrics without re-gearing before consideration of a positive rating action. This rating dynamic resulted in a higher than usual cushion against traffic and revenue losses.

Fitch's Conservative Approach to MLs

Fitch has long acknowledged the higher traffic and revenue volatility of MLs, and therefore required greater protections and higher financial thresholds for MLs compared with standard toll roads at the same rating level. This approach leaves extra cushion for underperformance prior to rating action compared to many standard toll roads.

Positive Rating Actions

North Tarrant Express Segments 1 & 2 (NTE 1 & 2)

NTE 1 & 2 was upgraded one notch to 'BBB' in late 2019, reflecting a combination of better than projected revenue performance as well as interest savings from a refunding. Combined, these factors boosted financial metrics to levels consistent with the higher rating level.

Riverside County Transportation Commission State Route 91 (RCTC SR-91)

Since opening in fiscal 2017, RCTC's SR-91 performed very well and far exceeded Fitch's original revenue projections. This level of outperformance boosted metrics to high levels leading to a one-notch upgrade to 'BBB+' in early 2020. The facility moderately under-performed Fitch's newly revised fiscal 2019 projections, but its revenue generation was well in excess of the commission's own projections of $50 million as published in its traffic and revenue consultant's report from late 2018 and remains far above Fitch's original projections.

Texas Department of Transportation Interstate Highway 35 East (TxDOT IH-35E)

The facility has out-performed Fitch's original projections since opening in fiscal 2017 and by increasing margins each year through fiscal 2019. The level of outperformance led to financial performance projected to be more in line with higher-rated facilities. As a result, the credit was placed on Rating Outlook Positive and may be upgraded if financial performance remains above critical thresholds after the pandemic crisis has passed.

Negative Rating Actions

Blueridge Transportation Group State Highway 288 (BTG SH-288)

BTG SH-288 was placed on Negative Outlook in March 2020 as a result of pandemic-related out-year revenue declines that cause the credit to draw down its ramp-up reserve account (RURA), sized to $66 million, at an accelerated rate. This dynamic causes the RURA to fall to low levels under Fitch's rating case before the project is projected to become operationally self-sufficient.

High Performance Transportation Enterprise C-470 (HPTE C-470)

In September 2019, C-470 was placed on Rating Watch Negative due to continued construction delays. By January 2020, significant progress was made towards completion and the Rating Watch changed to a Rating Outlook Negative. The project subsequently was completed, but its late opening in a pandemic calls into question the strength and timing of its ramp-up.

Projects Under Construction

The I-77 ML project was completed in 2019 while C-470 and BTG SH-288 were completed in 2020. Their completion leaves just two projects in the construction phase. One of the projects, I-66, is running on time and is expected to open in late 2022. I-15 is expected to open later than scheduled due to a delay in the back-office system development unrelated to the pandemic. Although delayed, Fitch views the project as possessing sufficient financial and structural flexibility to weather the estimated delay periods without a material credit impact. All projects have ratings in the 'BBB' category on their revenue bonds and TIFIA loans, reflecting relatively high current leverage and construction that mostly progressed in line with expectations.

Construction Completion Dates

Project	Projected Opening Date
Riverside County Transportation Commission (CA) [I-15]	Spring 2021
I-66 Express Mobility Partners LLC (VA)	November 2022

Source: Issuers.

Conclusion

Fitch's criteria for toll roads provides a structured, analytical approach with a focus on key rating drivers. Fitch conducted a detailed portfolio review of its rated U.S. MLs to determine attribute assessments for each category. Reviews of all MLs are conducted at least once annually. Fitch will assign attribute assessments for each new ML facility rating and will similarly monitor existing attribute assessments as part of its ongoing rating surveillance. Attribute assessments are published in Fitch's rating action commentary for each ML project. To the extent an adjustment to an existing assessment is determined to be appropriate, Fitch likewise publishes the change as part of its rating action commentary. In some cases, attribute assessment adjustments may lead to rating actions, depending on the underlying reasons for the change and the relative significance of the attribute being adjusted.

For a detailed description of the attribute drivers, see *Appendix A*; for attribute assessments by ML facility, see *Appendix D*; and for key statistics, see *Appendices F and G*.

Comparison of Actual Performance with Fitch Cases

	2015			2016			2017			2018			2019		
(Fiscal Year Total Revenues, $ Mil.)	Actual	Base Case	Rating Case	Actual	Base Case	Rating Case	Actual	Base Case	Rating Case	Actual	Base Case	Rating Case	Actual	Base Case	Rating Case
Project															
95 Express Lanes LLC (VA)	26[a]	23	23	71	65	65	84	78[b]	78[b]	92	79	79	109	107[b]	107[b]
I-77 Mobility Partners LLC (NC)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	2[a,c]	17	14
LBJ Infrastructure Group (TX)	22[a]	N.A.	N.A.	75	N.A.	N.A.[d]	100	105	87	125	113	92	152	130	112
North Tarrant Express Mobility Partners (NTE 1 & 2; TX)	52	48	42	73	72	64	92	92	81	115	119	89	152	132	96
NTE Mobility Partners Segments 3 LLC (NTE 3 A & B)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	3[a]	N.A.	N.A.	37[a]	20	8	90	73[b]	73[b]
Orange County Transportation Authority, California (SR-91)	47	42	42	55	45[b]	45[b]	57	51[b]	47[b]	60	52[b]	46[b]	65	56	50
Plenary Roads Denver (US-36 Phases 1 and 2 and I-25, CO)	N.A.	N.A.	N.A.	10[a,e]	9	9	14[e]	11	13[f]	19[e]	14	17[f]	20[e]	16	18[f]
Riverside County Transportation Commission SR-91 (CA)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	10[a]	8	6	50	23	18	61	66[b]	65[b]
Texas Department of Transportation (IH-35E MLs)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	5[a]	4	4	21	8	8	29	10	10

[a]Reflects partial year of operations. [b]Reflects revised set of cash flow projections beginning in the noted year. [c]Underperformance largely reflects delayed opening as compared with Fitch cases. [d]Additional Fitch stress case at time of financing had assumed a one-year completion delay to 2017. [e]Excludes program management, maintenance service and construction-related revenues. [f]Rating case began at higher starting point, but grew at lower rate than base case.
Note: Green highlight indicates actual revenues performed at or above base and rating case projections. Yellow highlight indicates performance at or above rating case, but below base case projections, or performance within +/-5% of both if identical. Red indicates performance below the base and rating cases. N.A. - Not applicable.
Source: Fitch Ratings, issuers.

Appendix A

Key Rating Driver Assessments for Toll Roads, Bridges and Tunnels

	Revenue Risk: Volume	Revenue Risk: Price	Infrastructure Development/Renewal	Debt Structure
Description	• Resilience of traffic volumes to macroeconomic stress, competition and other event risks. • Current toll rates relative to peers and distance to perceived revenue maximization point.	• Demonstrated willingness and ability to increase tolls. • Nature of any caps, statutory, contractual or political, if any.	• Approach to the ongoing capital program and maintenance, including planning, funding and management. • Adequacy and appropriateness of investment scope.	• Fixed-/variable-rate debt maturity profile. • Amortization profile, refinance risk. • Flow of funds, distribution test and reserves.
Stronger	• Proven resilient traffic base with relatively low volatility. • Includes facilities with near monopolistic characteristics, such as an essential road with a large commuter base, limited competing roads or other modes of transportation. • Low elasticity. • Low toll rates.	• Considerable legal or contractual flexibility to increase rates well above inflation. • Minimal legislative or political interference. • In practice, rates can be, and historically have been, increased with material flexibility above inflation.	• Modern very well maintained asset/facility with limited obsolescence risk. • Capacity above medium-term throughput forecasts. • Short-term and long-term maintenance needs, timing and capital planning are highly defined, experienced counterparties and dialogue with users/authorities. • No contractual development obligations or capex plan has significant flexibility in roll-out. • Access to levels of excess cash flow or clear demonstration of access to external funding to more than cover requirements.	• Senior ranking. • Fully amortizing debt. • Exhaustive and robust covenant package. • Forward-looking dividend lock-up set at a meaningful level. • Fully hedged/no unhedged financial risk. • Dedicated debt service liquidity including reserves greater than or equal to the next 12 months debt service, excluding bullets. • Comprehensive and strong security package. • No delayed draw features in transaction structure.
Midrange	• Proven traffic base with relatively moderate volatility. • Includes facilities with a larger percentage of commercial or discretionary traffic. An essential road facing some degree of competition from competing roads or other modes of transportation. • Price elasticity of demand to toll increases is low to moderate. • Moderate toll rates.	• Legal or contractual framework allows periodic price-cap rate increases that track inflation. • Some legislative or political interference. • In practice, rates historically have been increased at around inflation.	• Well-maintained asset/facility with potential obsolescence risk. • Capacity requires limited expansion or refurbishment to meet medium-term forecasts well within the issuer's experience. • Short-term and long-term maintenance plan are defined, although timing and capital planning are uncertain, moderately experienced counterparties and some dialogue with users/authorities. • Limited, in scope, contractual development obligations or capex plan has some degree of flexibility in roll-out. • Moderate levels of excess cash flow or some evidence of access to external funding but falls short of covering requirements.	• Second-ranking debt with limited subordination. • Limited refinance risk: well-spread maturities no more than 30% each, and/or proven and regular market access to refinance spread-out maturities. • Adequate covenant package. • Backward-only and/or forward looking dividend lock-up set at an adequate level. • Up to 20% of unhedged financial risk. • Dedicated debt service liquidity or corporate credit facilities including reserves greater than or equal to the next six months debt service, excluding bullets. • Adequate security package and/or strong negative pledge. • Limited delayed draw features in transaction structure.

Key Rating Driver Assessments for Toll Roads, Bridges and Tunnels

	Revenue Risk: Volume	Revenue Risk: Price	Infrastructure Development/Renewal	Debt Structure
Weaker	• Traffic with limited or no history and relatively high volatility. • Includes facilities with high discretionary traffic, meaningful competition or greenfield projects. • Untested or high price elasticity of demand. • High toll rates.	• Legal and contractual framework limits periodic price-cap rate increases well below inflation. • Considerable legislative or political interference. • Limited history of toll rate increases.	• Under-maintained asset/facility with high likelihood of obsolescence risk. • Capacity requires large expansion or refurbishment to meet medium-term forecasts and/or far outside the issuer's experience. • Short-term and long-term maintenance needs, timing and capital planning are undefined and unclear, with history of deferred maintenance and/or cost overruns or inexperienced counterparties and no dialogue with users/authorities. • Large, in scope, contractual development obligations or capex plan has no flexibility in roll-out. • Limited levels of excess cash flow or no demonstration of access to external funding and not able to cover requirements.	• Deeply subordinated. • Significant and concentrated maturities and/or debt amortization longer than assets/concession life, no track record of market access. • No or very limited covenant package. • No dividend lock-up or lock-up set at a very low level. • More than 20% of unhedged financial risk. • Dedicated debt service liquidity including reserves less than the next six months debt services, excluding bullets. • No or limited security package/weak negative pledge. • Elevated delay draw features in the transaction structure.
Financial Profile	• This key rating driver considers metrics for liquidity, debt service coverage and leverage in the context of the overall risk profile determined by review of the other key rating drivers. For example, a large, mature, toll road network with predominantly 'Midrange' and 'Stronger' characteristics could be rated in the 'A' category with debt service coverage ratios of between 1.4x–1.5x in the rating case. Moreover, a project's rating may be constrained by a 'Weaker' assessment on a key rating driver notwithstanding coverage ratios that may otherwise suggest a higher rating.			
Relative Importance of Key Rating Drivers	• Revenue Risk (Price and Volume) key rating factors generally have the most direct influence on operating toll roads ratings. This is because toll road operators usually have a relatively rigid cost base and, therefore, a lower than expected revenue flow could materially affect the projected cash flow generation and relevant coverage and leverage metrics.			

Source: Fitch Ratings.

Appendix B

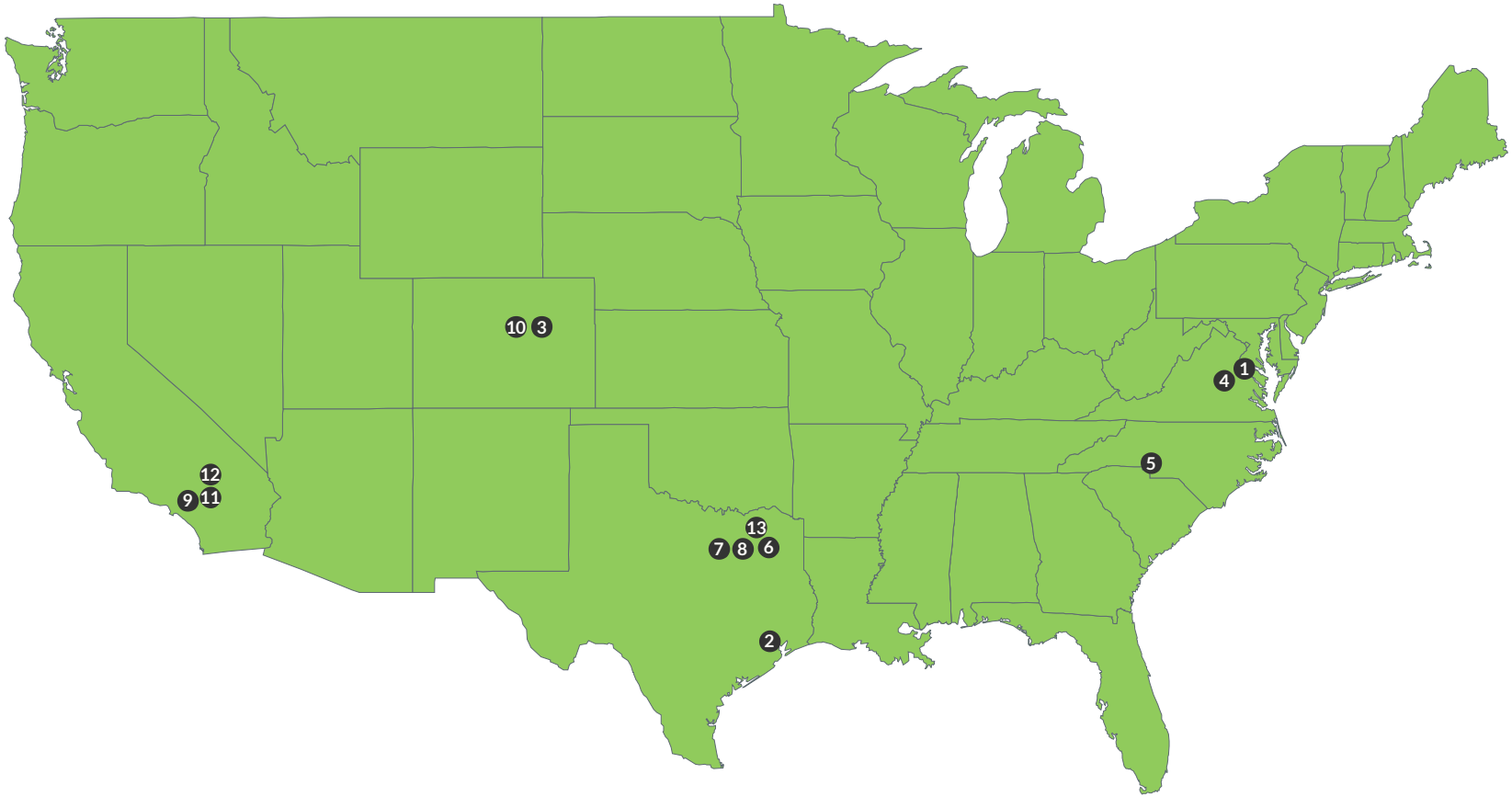
Managed Lanes' Revenue Volume Risk Factors

Assessment	Revenue Risk — Corridor Volume	Revenue Risk —ML Characteristics
Stronger	• Proven resilient corridor traffic base with relatively low volatility. • Near monopolistic characteristics (e.g. an essential road with a large commuter base, limited competing roads, or other modes of transportation). • Large and robust MSA with strong socioeconomic trends.	• Inherent volatility in ML traffic and revenue is inconsistent with a stronger risk assessment.
Midrange	• Proven corridor traffic base with moderate volatility. • A relatively large percentage of commercial or discretionary traffic; an essential road facing some degree of competition from competing roads or other modes of transportation. • Midsize MSA with solid economic underpinnings. Moderate growth area or growing region with some dependence on future development.	• Proven ML traffic base with relatively moderate volatility. Price elasticity of demand of toll increases is demonstrably low to moderate. • Moderate exposure to exempt vehicles (including scenarios in which compensation is received for exempt vehicles). • Moderate to high levels of congestion during peak commuting periods (including shoulder periods), but relatively free flowing conditions during other time periods. Limited two-directional congestion. • Efficient configuration. Moderate capture rates considering the configuration of the road. Moderate average trip distances as compared with the full length of the project.
Weaker	• Corridor traffic with limited or no history; relatively high volatility. • A large percentage of leisure or single purpose traffic, meaningful competition or expansion of competing facilities, or greenfield projects. • Small MSA with below-average wealth levels and stagnant to decreasing socioeconomic trends.	• Lack of demand history. Unproven or prolonged weak ramp-up period. Elevated volatility to economic shocks and relatively high seasonal volatility. Untested or demonstrably high price elasticity of demand. • Loose free access and other policies governing access to MLs that prevents pricing as an effective means of control of access to MLs and limit revenue potential. • Configuration (in terms of entry/exit points and ramps/reversibility and barriers) that inefficiently correlates with congestion points and traffic patterns, underutilizes highway connections and ultimately discourages usage and/or encourages violations. Increase in free GPL capacity that would meaningfully improve GPL flow eliminating congestion levels over a medium to longer term. • Low levels of congestion even in the peak periods. Low capture rates considering the configuration of the road. Very low average trip distances as compared with the full length of the project.

ML – Managed lane. GPL – General-purpose lane.
Source: Fitch Ratings.

Appendix C

Fitch-Rated U.S. Managed Lanes



1. 95 Express Lanes LLC
2. Blueridge Transp. Group SH-288
3. Colorado HPTE C-470
4. I-66 Express Mobility Partners
5. 1-77 Mobility Partners LLC
6. LBJ Infrastructure Group LLC
7. NTE Mobility Partners Segment 3 LLC (NTE 3 ABC)
8. North Tarrant Express Mobility Partners (NTE 1 & 2)
9. Orange County Transp. Authority [91 Express Lanes]
10. Plenary Roads Denver, LLC
11. Riverside County Transport. Commission [SR-91]
12. Riverside County Transport. Commission [1-15]
13. Texas Department of Transp. [IH-35E Project]

Source: Issuers.

Appendix D

Managed Lanes Ratings and Attributes

Project	Senior Lien Rating[a]	TIFIA Springing Lien[b]	Outlook	Completion Risk	Revenue Risk: Volume	Revenue Risk: Price	Infrastructure Development and Renewal	Debt Structure
95 Express Lanes LLC	BBB	BBB	Stable	N.A.	Midrange	Stronger	Stronger	Midrange[c]/Weaker[d]
BlueRidge Transportation Group SH-288	BBB–	BBB–	Negative	Midrange[e]	Midrange	Midrange	Stronger	Midrange
Colorado HPTE C-470	BBB	BBB	Negative	N.A.	Midrange	Midrange	Stronger	Midrange
I-66 Express Mobility Partners (VA)	BBB	BBB	Stable	Midrange	Midrange	Stronger	Stronger	Midrange
I-77 Mobility Partners LLC	BBB–	BBB–	Stable	N.A.	Weaker	Midrange	Stronger	Midrange
LBJ Infrastructure Group LLC	BBB–	BBB–	Stable	N.A.	Midrange	Midrange	Stronger	Midrange
North Tarrant Express Mobility Partners (NTE 1 & 2)	BBB	N.A.	Stable	N.A.	Midrange	Midrange	Stronger	Midrange
NTE Mobility Partners Segments 3 LLC (NTE 3 A & B)	BBB–	BBB–	Stable	N.A .	Midrange	Midrange	Midrange	Midrange
Orange County Transp. Authority (SR-91)	A+	N.A.	Stable	N.A.	Midrange	Stronger	Stronger	Stronger
Plenary Roads Denver, LLC	BBB–	BBB–	Stable	N.A.	Weaker	Midrange	Stronger	Midrange
Riverside County Transp. Commission (I-15)	BBB–[f]	N.A.	Stable	Midrange	Weaker	Stronger	Stronger	Stronger
Riverside County Transp. Commission (SR-91)	BBB+	BBB+	Stable	N.A.	Midrange	Stronger	Stronger	Midrange
Texas Department of Transportation [IH-35E Project]	N.A.	BBB	Positive	N.A.	Midrange	MIdrange	Stronger	Midrange

[a]Excludes springing liens. [b]These TIFIA liens spring to senior under a bankruptcy-related event. [c]Midrange debt assessment for senior private activity bonds and subordinate TIFIA loan. [d]Weaker debt assessment for deeply subordinated Virginia Transportation Infrastructure Bank (VTIB) debt only. [e]The project was completed subsequent to the assignment of the completion risk score. [f]Senior TIFIA loan rating. Note: Cells highlighted green indicate positive movement since the prior peer review. Cells highlighted red indicate negative rating movement, though none was taken during this time span. N.A. — Not applicable. TIFIA – Transportation Infrastructure Finance and Innovation Act.
Source: Fitch Ratings.

Revenue Risk – Volume Assessments

Project	Revenue Risk: Volume	Corridor Volume	ML Characteristics
95 Express Lanes LLC	Midrange	Stronger	Midrange
BlueRidge Transportation Group SH-288	Midrange	Midrange	Weaker
Colorado HPTE C-470	Midrange	Stronger	Weaker
I-66 Express Mobility Partners (VA)	Midrange	Stronger	Weaker
I-77 Mobility Partners LLC	Weaker	Midrange	Weaker
LBJ Infrastructure Group LLC	Midrange	Stronger	Midrange
North Tarrant Express Mobility Partners (NTE 1 & 2)	Midrange	Stronger	Midrange
NTE Mobility Partners Segments 3 LLC (NTE 3 A & B)	Midrange	Stronger	Midrange
Orange County Transp. Authority (SR-91)	Midrange	Stronger	Midrange
Plenary Roads Denver, LLC	Weaker	Midrange	Weaker
Riverside County Transp. Commission (I-15)	Weaker	Midrange	Weaker
Riverside County Transp. Commission (SR-91)	Midrange	Stronger	Midrange
Texas Department of Transportation [IH-35E Project]	Midrange	Midrange	Midrange

ML – Managed lane. Note: Cells highlighted green indicate positive movement since the prior peer review. Cells highlighted red indicate negative rating movement, though none was taken during this time span.
Source: Fitch Ratings.

Appendix E

Managed Lane Configuration and Pricing Policies

Facility	Pricing Policy (e.g. Revenue Maximization/ Throughput Maximization, Hybrid)	Pricing Frequency Policy (e.g. Dynamic, Variable)	Free/Reduced Price Policy	Heavy Vehicles Allowed?	Owner/Equity Sponsors	Ownership Type	Location (Region)	Facility Distance (Miles)	ML Miles	Configuration
95 Express Lanes LLC	Revenue Maximization	Dynamic	HOV3+ free	No	Transurban	PPP	Washington D.C./ Northern Virginia	50	75	2–3 ML (reversible)/4 GPLs in each direction
Blueridge Transportation Group LLC (FL)	Revenue Maximization	Fixed time of day schedule up to soft toll cap of $0.75/mile ($1.50/mile on direct connectors), which can be exceeded to handle ML speeds if they become slower than 45 mph or 15mph below speed limit. Also floor of greater of $0.05/mile or $0.35	No discount or exemption	Yes	ACS ID, Shikun & Binui USA, InfraRed, Northleaf, Clal Insurance Group, Star America	PPP	Houston	10.30	41.2	2 ML/3–4 GPLs in each direction
Colorado High Performance Transportation Enterprise (CO)	Blend of throughput and revenue maximization	Variable; time of day	No discount or exemption	Yes	Colorado High Performance Transportation Enterprise	Governmental	Denver	12.5	31.1	Eastbound: 1–2ML/2GPL; Westbound: 1–2ML/2GPL
I-66 Express Mobility Partners LLC (VA)	Revenue Maximization	Dynamic tolling, minimum toll of $0.20/mile.	HOV3+ free	Yes	Cintra, Meridiam, APG, John Laing	PPP	Washington D.C./Northern Virginia	22	88	2 MLs/3 GPLs
I-77 Mobility Partners	Revenue Maximization	Dynamic after first six months of operations	HOV3+ free	Yes	Cintra Infraestructuras, S.A./Aberdeen Global Infrastructure II LLP/John Laing	PPP	North Carolina	26	94.4	1–2 ML/2–4 GPL in each direction
LBJ Infrastructure Group LLC	Revenue Maximization	Dynamic pricing with a soft cap on toll rates of $0.75 (2009 $) per mile	50% peak period discount for HOV2+, discount is fully subsidized by TxDOT	Yes	Cintra/Meridiam/ APG	PPP	Dallas/Fort Worth	13.25	60	2–3 ML/4 GPL/ 2–3 frontage in each direction
North Tarrant Express Mobility Partners (NY) (NTE)	Revenue Maximization	Dynamic pricing with a soft cap on toll rates of $0.75 (2009 $) per mile	50% peak period discount for HOV2+ until 2025, discount is fully subsidized by TxDOT; trucks pay higher toll, based on shape	Yes	Cintra/Meridiam	PPP	Dallas/Fort Worth	13.3	53.2	NTE 1: 2 ML/ 2 GPL/ 2 frontage NTE 2: 2 ML/3 GPL, 2 frontage in each direction

Managed Lane Configuration and Pricing Policies

Facility	Pricing Policy (e.g. Revenue Maximization/ Throughput Maximization, Hybrid)	Pricing Frequency Policy (e.g. Dynamic, Variable)	Free/Reduced Price Policy	Heavy Vehicles Allowed?	Owner/Equity Sponsors	Ownership Type	Location (Region)	Facility Distance (Miles)	ML Miles	Configuration
NTE Mobility Partners Segment 3 LLC (NY)	Revenue maximization	Dynamic with soft cap of $0.75/mile ($2010 prices), indexed to inflation	HOV3+ 50% discount, reimbursed by TxDOT to operator. Discount expires in 2025.	Yes	Cintra/Meridiam/ APG	PPP	Dallas/Fort Worth	10.2	40.8	2 MLs each direction/2–4 GPLs depending on segment and location/2 discontinous frontage lanes
Orange County Transportation Authority (CA) [91 Express Lanes]	Blend of throughput and revenue maximization	Variable time of day	50% discount for HOV3+ (and zero emission) in peak from 4p.m.–6 p.m. eastbound, HOV3+ free during off-peak	No	Orange County Transportation Authority (OCTA)	Governmental	Orange County/Riverside County, CA	10	40	2 ML/5 GPL in each direction
Plenary Roads Denver	Revenue maximization	Variable. Requirement that peak-period toll rates are no less than the RTD express bus fare	HOV3+ free (converted from HOV2+ in January 2017)	Yes	Plenary Group (Canada), Ltd. (Plenary Group)	PPP	Denver	22.7	45.4	1ML/2GPL in each direction on US36. 2ML (reversible)/ 3GPL I-25
Riverside County Transportation Commission (CA) [I-15]	Blend of throughput and revenue maximization	Dynamic pricing	HOV3+ at 50% discount	No	Riverside County Transportation Commission (RCTC)	Governmental	Inland Empire, CA	14.5	48.2	1 or 2 MLs/3GPLs
Riverside County Transportation Commission (CA) [SR-91]	Blend of throughput and revenue maximization	Variable time of day with scheduled rate adjusted quarterly	50% discount for HOV3+ in peak hours, HOV3+ free during off-peak	No	Riverside County Transportation Commission (RCTC)	Governmental	Orange County/Riverside County, CA	8	36.32	2 ML/5 GPL in each direction
Texas Department of Transportation (TX) [IH-35E Project]	Revenue Maximization	Dynamic after first six months of operations, with a soft cap of $0.93/mile ($2021 prices), subject to escalation, which can be exceeded to manage ML speeds if they fall below 50 mph.	50% discount for HOV2+ in peak through 2018	Yes	Texas Department of Transportation	Governmental	Dallas/Fort Worth	18	36	2 MLs (reversible)/ 3–4 GPLs in each direction

ML – Managed lane. HOV3+ – High occupancy vehicles with three or more passengers. TxDOT – Texas Department of Transportation. PPP –Public-private partnership. GPLs – General-purpose lanes.
Source: Issuers.

Appendix F

Selected Financial and Operating Data by Facility

	Senior Lien and Springing TIFIA Lien Rating[a]	Outlook	FRC: Average Total Scheduled DSCR (x)[b]	FRC: Min Mandatory DSCR (x)	Opening Date	FRUY (FY)[c]	FRUY: Total Revenues ($000 FY)[d]	FY 2019 Total Revenues ($000)	FY 2019 Tolled Traffic (000)	Avg. Total Revenue/ Transaction ($)	FY 2019/ FRUY Revenue per Lane Mile ($000)[d]	FY 2019 Total Gross Debt Outstanding[e]	FY 2019 Total Debt per Lane Mile ($000)[e]
95 Express Lanes LLC	BBB[f]	Stable	2.1	1.9	Dec. 2014	2025	164,929	109,084	N.A.	N.A.	2,199	826,468	11,020
Blueridge Transportation Group LLC (FL)	BBB–	Negative	1.4	1.0[g]	Nov. 2020	2025	32,002	N.A.	N.A.	N.A.	777	630,000	15,291
Colorado High Performance Transportation Enterprise (CO)	BBB	Negative	2.5	1.0	Aug. 2020	2022	13,223[h]	N.A.	N.A.	N.A.	425	272,211	8,753
I-66 Express Mobility Partners LLC (VA)	BBB	Stable	2.2	1.5	Nov. 2022	2025	135,810	N.A.	N.A.	N.A.	1,543	1,845,785	20,975
I-77 Mobility Partners	BBB–	Stable	2.9	2.8	Nov. 2019	2023	40,351	2,455	3,502	N.A.	427	301,753	3,197
LBJ Infrastructure Group LLC	BBB–	Stable	2.8	2.5	Sept. 2015	2018	124,689	152,221	48,141	3.16	2,537	1,739,478	28,991
North Tarrant Express Mobility Partners	BBB	Stable	2.6	1.3	Oct. 2014	2017	91,925	152,115	33,883	4.49	2,859	1,202,630	22,606
NTE Mobility Partners Segment 3 LLC	BBB–	Stable	1.9	1.5	July 2018	2021	89,308	89,647	32,669	2.74	2,197	1,522,896	37,326
Orange County Transportation Authority (CA) [91 Express Lanes]	A+	Stable	3.7	2.5	Dec. 1995	1998	N.A.	65,195	17,546	3.72	1,630	97,795	2,445
Plenary Roads Denver	BBB–	Stable	1.6	N.A.[i]	March 2016	2019	20,064	20,064	19,678	1.02	442	177,607	3,912
Riverside County Transportation Commission (CA) [I-15]	BBB–[j]	Stable	1.6	1.0	Spring 2021	2023	11,731	N.A.	N.A.	N.A.	243	152,215	3,158
Riverside County Transportation Commission (CA) [SR-91]	BBB+	Stable	1.6	1.5	March 2017	2018	50,447	61,188	15,143	4.04	1,685	671,296	18,483
Texas Department of Transportation (TX) [IH-35E Project]	BBB	Positive	3.2	2.5	May 2017	2018	20,689	29,310	27,965	1.05	814	305,831	8,495

[a]Includes ratings of TIFIA liens that spring to senior under bankruptcy event as applicable, unless noted otherwise. Not all facilities have TIFIA loans. [b]Excludes outliers. For facilities that do not have TIFIA loans or deferability provisions, DSCR shown is equivalent to mandatory. [c]Actual historical year, if applicable, otherwise as projected by Fitch under the FRC. [d]Maximum of actual FY 2019 revenues, or FRUY, as projected by Fitch under the FRC. [e]Includes accruals and total TIFIA loan capacity, as applicable. [f]Includes deeply subordinated Virginia Transportation Infrastructure Bank loan. [g]Minimum DSCR includes transfers from ramp up reserve. [h]Tolling began in August 2020, approximately two years behind schedule due to construction delays. The late opening in a pandemic adds uncertainty to the timing and strength of ramp-up. [i]A breakout between scheduled and mandatory DSCR was not available at the time of publication. [j]RCTC's I-15 project has a senior TIFIA loan. FRC– Fitch Rating Case. DSCR – Debt service coverage ratio. FRUY – First ramped up year. FY – Fiscal year. N.A. — Not applicable. TIFIA – Transportation Infrastructure Finance and Innovation Act.
Source: Fitch Ratings, issuers.

Appendix G

Selected Financial and Operating Data by Rating

	Senior Lien and Springing TIFIA Lien Rating[a]	Outlook	FRC: Average Total Scheduled DSCR (x)[b]	FRC: Min Mandatory DSCR (x)	Opening Date	FRUY (FY)[c]	FRUY: Total Revenues ($000 FY)[d]	FY 2019 Total Revenues ($000)	FY 2019 Tolled Traffic (000)	Avg. Total Revenue/ Transaction ($)	FY 2019/FRUY Revenue per Lane Mile ($000)[d]	FYE 2019 Total Gross Debt Outstanding [e]	FYE2019 Total Debt per Lane Mile ($000)[e]
Orange County Transportation Authority (CA) [91 Express Lanes]	A+	Stable	3.7	2.5	Dec. 1995	1998	N.A.	65,195	17,546	3.72	1,630	97,795	2,445
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95 Express Lanes LLC	BBB[f]	Stable	2.1	1.9	Dec. 2014	2025	164,929	109,084	N.A.	N.A.	2,199	826,468	11,020
Colorado High Performance Transportation Enterprise (CO)	BBB	Negative	2.5	1.0	Aug.2020	2022	13,223[g]	N.A.	N.A.	N.A.	425	272,211	8,753
I-66 Express Mobility Partners LLC (VA)	BBB	Stable	2.2	1.5	Nov. 2022	2025	135,810	N.A.	N.A.	N.A.	1,543	1,845,785	20,975
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Riverside County Transportation Commission (CA) [I-15]	BBB–[j]	Stable	1.6	1.0	Spring 2021	2023	11,731	N.A.	N.A.	N.A.	243	152,215	3,158

[a]Includes ratings of TIFIA liens that spring to senior under bankruptcy event as applicable, unless noted otherwise. Not all facilities have TIFIA loans. [b]Excludes outliers. For facilities that do not have TIFIA loans or deferability provisions, DSCR shown is equivalent to mandatory. [c]Actual historical year if applicable, otherwise as projected by Fitch under the FRC. [d]Maximum of actual FY 2019 revenues, or FRUY, as projected by Fitch under the FRC. [e]Includes accruals and total TIFIA loan capacity as applicable. [f]Additionally includes deeply subordinated Virginia Transportation Infrastructure Bank loan. [g]Tolling began in August 2020, approximately two years behind schedule due to construction delays. The late opening in a pandemic adds uncertainty to the timing and strength of ramp-up. [h]Minimum DSCR includes transfers from ramp up reserve. [i]A breakout between scheduled and mandatory DSCR was not available at the time of publication. [j]RCTC's I-15 project has a senior TIFIA loan.
FRC– Fitch Rating Case. DSCR – Debt service coverage ratio. FRUY – First ramped up year. FY – Fiscal year. N.A. – Not applicable. TIFIA – Transportation Infrastructure Finance and Innovation Act.
Source: Fitch Ratings, issuers.