

SUSTAINABILITY MATURITY MODEL

Source: *NCHRP Report 750, Volume 4 (Appendix F) With a few modifications.*

		LEVEL 0 –	LEVEL 1 –	LEVEL 2 –	LEVEL 3 –	LEVEL 4 –
		SAFE MOBILITY	COMPLIANT TRANSPORTATION	GREEN TRANSPORTATION	SUSTAINABLE TRANSPORTATION	TRIPLE BOTTOM LINE (TBL) SOCIETAL SUSTAINABILITY
Type		Safety Mobility	Compliant Environmental	Begin Environmental, Economic, and social Equity (3E) -- Emphasizes Environment	Supports Balanced Sustainable 3E Transportation	Supports societal sustainability (TBL) that integrates transportation with societal quality of life Societal Beyond Transportation
Support & Infrastructure		<ul style="list-style-type: none"> Supports societal mobility & safety Favors government ownership & control of the transportation infrastructure Transportation agency: infrastructure owner-manager and regulator 	<ul style="list-style-type: none"> Supports societal mobility & safety Compliance with environmental, economic, and social legislative requirements Transportation agency: infrastructure owner-manager & and regulator Top-down planning 	<ul style="list-style-type: none"> Supports societal mobility, safety, environmental, economic, and social needs -- Emphasizes Environment Transportation agency: infrastructure owner-manager and regulator 	<ul style="list-style-type: none"> Supports balanced sustainable transportation Risk-sharing between public and private sector Infrastructure integrator (some owner-operator & some private) Cross-Asset Optimization Transportation Asset Management Regulator 	<ul style="list-style-type: none"> Supports societal sustainability TBL Broad agency decision-making partnerships Risk-sharing between public and private sector Infrastructure Integrator (some owner, some owner-operator, and some private) Regulator and steward partner Shared Infrastructure & Decisions
A. Consensus on Needs & Goals (Drivers)	Governance & Policy Making	<ul style="list-style-type: none"> Needs driven by political decision-makers and major stakeholders Strategic goals determined by high-level decision-makers and constrained by funding and regulations (including environmental) Public participation limited to formal regulated processes 	<ul style="list-style-type: none"> Needs driven by political decision-makers and major stakeholders Strategic goals determined by high-level decision-makers and constrained by funding and greater focus on regulatory compliance (including environmental) Some outreach and public consensus building 	<ul style="list-style-type: none"> Needs driven by political decision-makers, major stakeholders, and assessment of public sentiment Greater focus on environmental improvement, stewardship, and social context Significant formal outreach and consensus-building efforts 	<ul style="list-style-type: none"> Needs more driven by public sentiment, performance, and sustainability considerations Goals focus on sustainable transportation services and programs More transparency and active outreach and two-way public dialogue 	<ul style="list-style-type: none"> Cross-agency TBL decision-makers, stakeholders, and the public participate actively in needs determination and goal-setting Goals and policies focused on TBL sustainability Active two-way public engagement and consensus in strategic decisions Shared Goal-setting & Public Consensus
		D. Rulemaking & Regulatory	<ul style="list-style-type: none"> Expert led Heavily influenced by organized interests and economic stakeholders Minimal public involvement 	<ul style="list-style-type: none"> Expert led Heavily influenced by organized interests and economic stakeholders Increased public involvement Highly politicized and conflict based 	<ul style="list-style-type: none"> Expert led Open to a transportation plurality of interests, stakeholders, and activists Substantial public involvement during transportation post-decision-making phase (i.e., "do you approve?") Highly politicized and conflict based 	<ul style="list-style-type: none"> Public-expert partnership in developing regulation and rules—experts invite and encourage public participation Open to a transportation plurality of interests, stakeholders, and activists Substantial public involvement during the entire transportation rulemaking process Less politicized and more cooperative
H. Outreach & Communication (& Partnership)		<ul style="list-style-type: none"> One-way communication to explain transportation priorities and plans 	<ul style="list-style-type: none"> One-way communication to explain transportation priorities and plans with formal requirements to present plans but limited feedback 	<ul style="list-style-type: none"> One-way communication to explain transportation priorities and plans with highly structured presentation and feedback 	<ul style="list-style-type: none"> Sustainable Transportation two-way active engagement and communication between transportation agencies, public, stakeholders, and decision-makers 	<ul style="list-style-type: none"> Full TBL regular two-way active engagement and communication between transportation agencies, public, stakeholders, and decision-makers Involvement of stakeholders at all stages of the decision-making and planning process Active outreach to identify and include previously underrepresented groups Shared Engagement & Communication
B. Planning & Programming	Decision-making	<ul style="list-style-type: none"> Emphasizes mobility, safety, and quantity (more, faster) within mode Expands in response to travel demand ("accept and accommodate") Transportation planning is siloed Transportation planning is not connected to land use decision-making Limited by political jurisdiction Limited data and related performance measures 	<ul style="list-style-type: none"> Emphasizes mobility, safety, and quantity (more, faster), alternate modes Plans, builds based on forecasts of likely demand ("predict and provide") Transportation planning is siloed Transportation planning more influenced by land use decision-making Limited by political jurisdiction Compliance-based reporting 	<ul style="list-style-type: none"> Emphasizes mobility etc. but considers flexibility, accessibility, connectivity, system efficiency, and environmental context Emphasizes improved intermodal operations and environment Manages transportation demand and capacity Formal and informal links exist between other planning entities Plans, builds based on forecasts of likely demand and land use plans Limited by political jurisdiction Performance-based reporting, including environment 	<ul style="list-style-type: none"> Emphasizes flexibility, accessibility, connectivity, system efficiency, safety, security and context Emphasizes Transportation multi-modalism and connections between modes State Transportation proactive demand and capacity management Stronger planning links with other planning entities Preferred vision to planning and provision ("deliberate and decide")—build scenarios, backcast, deliberate, and decide Planning and investment decisions are driven by reliable and up-to-date data that reflect the full range of effects of transportation investment 	<ul style="list-style-type: none"> Emphasizes flexibility, accessibility, connectivity, system efficiency, safety, security, and full TBL context Emphasizes TBL multi-modalism and connections between modes System-wide (state & local) proactive demand and capacity management Emphasizes integrated planning engaging multiple agencies Preferred vision to planning and provision ("deliberate and decide")—build TBL scenarios, analyze, deliberate, coordinate Flexible regional focus that engages multiple jurisdictions Shared Integration & Multi-modal Goals
		C. Budgeting & Resource Allocation (Economics)	<ul style="list-style-type: none"> Budget process is competitive (e.g., agencies compete for funds), siloed, & driven by previous allocation decisions (e.g., starts with last year's budget) Ignores larger social, regional, and economic costs and benefits of transportation—focuses on transportation-centric cost-benefit analysis Inflexible—funds are bucketed and segregated by rules and policy Politicized—transportation funding is driven by taxes and formulae 	<ul style="list-style-type: none"> Budget process is competitive (e.g., agencies compete for funds), siloed, and driven by previous allocation decisions (e.g., starts with last year's budget) Focuses primarily on immediate direct costs, but does include consideration of social, regional, and economic benefits of transportation Inflexible—funds are bucketed and segregated by rules and policy Politicized—transportation funding is driven by taxes and formulae 	<ul style="list-style-type: none"> Budget process is competitive (e.g., agencies compete for funds), siloed, and driven by previous allocation decisions (e.g., starts with last year's budget) Incorporate full social, environmental, fiscal, economic, and other costs into planning and provision 	<ul style="list-style-type: none"> Budget process is more integrated and cooperative Incorporates social, environmental, fiscal, economic, and other costs into planning and provision More independent funding—funds for transportation are derived more sustainably from users and other benefiting entities
E. Service & Product Delivery (Performance Measures)	Enterprise Management	<ul style="list-style-type: none"> Transportation safety and mobility performance measured and reported Performance standards and incentives associated with traditional performance measures Efficient and best-value business processes Focus on technical specialties and standards 	<ul style="list-style-type: none"> Transportation safety and mobility performance measured and reported Some environmental performance management reports Ad hoc sustainability initiatives Performance standards and incentives associated with traditional performance measures Efficient and best-value business processes—some environmental and social issues considered Focus on technical specialties and standards 	<ul style="list-style-type: none"> General sustainability objectives established Sustainability performance (centered on environment) reporting and management common among delivery functions Focus on state trans. multidisciplinary workforce—development of more flexible transportation performance standards Developing sustainability education, training, and internal incentives to support sustainable programs Culture of environmental stewardship 	<ul style="list-style-type: none"> Balanced Transportation Sustainability performance measured and reported across most functions Transportation cross-asset prioritization & optimization Transportation dollar cost-benefit common valuation with balanced sustainability Balanced Transportation Sustainability embedded in all business processes (e.g., project delivery, procurement, O&M) Focus on state & local transportation multidisciplinary workforce—organization commitment to flexible transportation performance standards Commitment to balanced transportation sustainability education, training, and internal incentives to support sustainable programs Culture of transportation sustainability and stewardship 	<ul style="list-style-type: none"> TBL Sustainability performance measured and reported with TBL-related improvement targets, periodic reevaluation of performance measures and regular evaluation of TBL sustainability achievements TBL Prioritization TBL dollar common valuation Commitment to societal sustainability in all service and project delivery functions TBL Sustainability embedded in all business processes (e.g., project delivery, procurement, O&M) Focus on societal multidisciplinary workforce—established and flexible standards associated with sustainability Commitment to TBL sustainability education, training, and internal incentives Culture of TBL sustainability and stewardship of societal well-being Shared Performance & Prioritization
		F. Compliance & Dispute Resolution (Politics)	<ul style="list-style-type: none"> Highly politicized Informal brokering between powerful stakeholders 	<ul style="list-style-type: none"> Highly politicized Informal brokering between powerful stakeholders Dependence on law and judicial system Adversarial relationship between key stakeholder groups 	<ul style="list-style-type: none"> Less influenced by powerful stakeholders in the decision-making process Dependence on law and judicial system Less adversarial relationship between key stakeholder groups and more constructive dialogue 	<ul style="list-style-type: none"> Emphasizes "deliberate and decide" and constructive engagement Avoids dependence on law and judicial system
G. Education & Training (Workforce & Culture Change)		<ul style="list-style-type: none"> Focus on technical specialties and standards Performance standards and incentives associated with traditional performance measures 	<ul style="list-style-type: none"> Focus on technical specialties and standards Performance standards and incentives associated with traditional performance measures Informal sustainability training and recruitment and integration of environmental specialists into transportation agencies 	<ul style="list-style-type: none"> Focus on state trans. multidisciplinary workforce—development of more flexible performance standards Developing sustainability education, training, and internal incentives to support sustainable programs Culture of environmental stewardship 	<ul style="list-style-type: none"> Focus on state and local transportation multidisciplinary workforce—organization commitment to flexible performance standards Commitment to trans. balanced sustainability education, training, and internal incentives to support sustainable programs Culture of transportation sustainability and stewardship 	<ul style="list-style-type: none"> Focus on societal (beyond transportation) multidisciplinary workforce—established and flexible standards associated with sustainability Commitment to TBL sustainability education, training, and internal incentives Culture of TBL sustainability and stewardship of societal well-being Shared Societal Commitment