

Chapter 6: Measurement and Evaluation

The importance of measuring the outcomes of plan goals and strategies has become a central and essential element in transportation planning. In order for measurements to be useful, they must be based on a set of criteria, and be designed to advance the goals.

Evaluation Metrics

In defining goals and strategies, the five topics areas are the primary organizing tool, but the strategies and associated tasks are designed to target quantifiable data and apply it to support implementation of the plan and progress in reaching the goals. To evaluate the success of the implementation, strategies and tasks must be built around the core goal and substantively demonstrate progress towards its achievement.

The performance measures identified here are essential. The metrics collected and how, or if, they change over time, form the basis for assessing if and to what degree the actions we take have the intended effect. As a first step in this evaluation process, baseline data points will be compiled for each of the metrics, and the targets finalized with the technical committee monitoring the plan implementation. At the end of each plan year, MCRPC will compile and publish a report on the activities and results of that year, including quantitative data comparisons where possible.

Performance measures were also defined in the 2012 LRTP, but MCRPC staff quickly realized that much of the data needed to support qualitative analysis or comparison simply was not available; attempts to draw conclusions from the limited material that was available were likely to result in distorted findings. Certain categories of information were inaccessible due to protection of personal privacy or proprietary information, or because the public agencies which had relevant information archives were reluctant to release their materials for use by others.

Although the plan goals, strategies and actions are organized according to the subject areas discussed above, many of the underlying performance measures provide evidence regarding multiple strategies or actions. In addition to the listing here, the performance measures, organized by subject matter, are included as a pull-out reference at the end of Chapter 5.

Our framework defines evaluation as a process for assessing the effectiveness of the plan's impact, using performance measures applied to each strategy. Measuring outcomes determines if specific strategies have led to the desired objectives, such as a targeted level of quality or service, or scope of operation. The impact of particular actions may also be evaluated individually as well as by broader assessment of system elements.

Strategies and tasks not set in stone. The current strategies and tasks set the stage for the work and progress anticipated over the next five years. As strategies come to fruition, they will be updated by amendment to move the relevant goals forward, and will be matched with updated performance measures as well, to continue evaluating progress toward the goals.

Performance measures are categorized as either activity or outcome based. Activity-based metrics reflect tracking of various system characteristics which in their original form or through further analysis provide continuing evaluation of aspects of transportation system performance. Generally, these consist of information to be collected on a regular basis, or of data obtained and included in the data dashboard project.

Outcome-based performance measures are generally applied to discrete projects or efforts with a defined end point in time or in achievement of specified results. In some instances this category has been expanded to include ongoing tasks that should be evaluated periodically to determine if the task is producing the expected results or outcomes, or if the task should be revised, replaced or removed.

General Community Factors

Positive Contributors

- Intergovernmental communication and cooperation regarding the transportation system
- A mature existing transportation system with limited gaps in service at functional levels
- Local governments engaged in cooperative support of public transit
- Local governments adopting land use plans favoring compact and contiguous development
- Social service agencies and other transportation providers able to accommodate the public for certain specialized transportation needs
- Institutional and corporate support for
- Active coalition of transportation providers
- Social service agencies involved in process to support vulnerable populations

Challenges

- Lack of standardized data and information
- Lack of central repository or sourcing for some data and metrics
- Unanticipated costs incurred due to infrastructure failure or obsolescence
- Demands for service levels incompatible with available resources
- Limited public understanding of transportation system needs and costs
- Uneven distribution of maintenance over time
- Lack of

Funding Opportunities

- Federal surface transportation program funding
- Federal transit funding as available from the Highway Trust Fund
- State reimbursement for transit operations
- ITEP funding for ancillary elements of projects
- PPP with large local employers to provide job access
- Transportation and Health project funding through relevant foundations
- Federal Transit Administration formula funding
- FTA Section 5310 grants
- HSTP program funding for coordination
- Transportation support in social service funding for people with disabilities
- Private foundation grants targeted to mobility and access enhancement

Partners

IDOT, FWHA, FTA, MPO municipal, transit and airport partners, social service transportation providers, private sector transportation providers, local development companies

Performance Metrics & Targets

In instances where the required data is incomplete or of statistically suspect quality, these conditions will be detailed in the annual performance report. If feasible, recommendations for obtaining supplemental or better supported data can also be made.

Index No.	Type	Strategy No.	Metric	Target/ preferred result	Target Date
Section I: System Preservation					
1	O	I.1	Create project selection criteria matrix	Project Selection Process criteria and process	2/28/2018
2	O	I.1	Adopt Project Selection Process	Use for 2019-2023 TIP	3/31/2018
3	A	I.1	Track final project cost data	Data provided by governments	6/30/2018
4	O	I.2	Catalogue system status and condition as of target date	base benchmark for system condition analysis	3/31/2018
5	A	I.2	Lane miles of streets, roads and trails in MPA as of 12/31/2017	base benchmark for system condition analysis	3/31/2018
6	O	I.2	Available extent of pedestrian and bicycle facilities within the MPA, including of bike trail and on-street bike lane	Increased extent and access	Annual
7	O	I.2	Ratio of maintenance and improvement costs to new construction project costs	Parity in expenditures shifting to higher expenditures for maintenance and improvement to existing system	Annual
8	O	I.2	Ratio of total lane miles to total area annexed	Reduction in lane miles to annexed area	Biennial
9	O	I.2	Bridges in condition insufficient for public use enumerated annually	Improved ratio of bridges in good repair to total number of bridges in jurisdiction	Annual
10	A	I.2	Street locations in condition insufficient for public use enumerated annually	Improved aggregated PASER rating	Annual
11	A	I.2	Annual System Usage - passenger vehicles	benchmark for system condition analysis	Annual
12	A	I.2	Annual System Usage - freight vehicles	benchmark for system condition analysis	Annual
13	A	I.2	Annual System Usage - Public Transit trips provided	benchmark for system condition analysis	Annual
14	A	I.2	Annual System Usage - bicycle	benchmark for system condition analysis	Annual
15	A	I.2	Annual System Usage - pedestrian on trails	benchmark for system condition analysis	Annual
16	A	I.2	Vehicle miles traveled per capita, by mode where data exists	benchmark for system condition analysis	Annual
17	A	I.2	Ratio of streets to sidewalks	benchmark for system condition analysis	Annual

Index No.	Type	Strategy No.	Metric	Target/ preferred result	Target Date
18	A	1.2	Percentage of linear street miles with sidewalks, annually	Higher percentage over time	Annual
19	A	1.2	Percentage of population living within a half-mile distance of frequent-service transit stops, by headway	benchmark for system condition analysis	Annual
20	A	1.2	Annual ridership of Connect Transit	Transit fixed route ridership increases year to year	Annual
21	A	1.2	Annual ridership of Connect Mobility	Mobility ridership remains stable	Annual
22	A	1.2	Annually computed total area served by Connect Transit fixed-route service	Stable or continuing increase as percentage of incorporated area (unless allowed service area is revised through MTD)	Annual
23	A	1.2	Number of locations identified per year as destinations for Connect Mobility riders	GIS-based data developed demonstrating expanded service area	Annual
24	A	1.2	Number of users of non-profit transportation programs	Service needs stable, or declining	Annual
25	A	1.2	Area of community within ¼ mile of fixed transit route on 12/31/2017 and determined annually	Increased % of municipal area within ¼ mile of transit fixed routes	Annual
26	A	1.2	Base trip transit fares	Stable	Annual
27	A	1.2	Annual walk score in representative neighborhoods	benchmark for system condition analysis	Annual
28	A	1.2	Annual bike score in representative neighborhoods	benchmark for system condition analysis	Annual
29	A	1.2	Annual transit score in representative neighborhoods	benchmark for system condition analysis	Annual
30	A	1.2	Biennially, include and analyze conditions and investments for each mode in annual report	Improved ROI	
31	O	1.3	Include criteria to encourage regional and joint jurisdiction projects project scoring; see also I.1		3/31/2018
32	O	1.3	Document regional project partnership opportunities and outcomes as they occur.		Variable
33	O	1.4	Establish MPO definition of ITS components and functions	Basis for ITS planning and programming	4/30/2018
34	O	1.4	Determine interest in local adoption of State ITS architecture document.		5/31/2018
35	O	1.4	If needed, develop local ITS architecture document		11/1/2018
36	O	1.5	Initiate information exchange with IDOT District 5 of local project programming and costs throughout project life	Timely transfer of program and cost information	2/28/2018
37	O	1.5	Initiate coordinated project scheduling between IDOT D5 and local governments		3/31/2018
38	A	1.5	Expand coordination with local governments, institutions, major employers, CIRA and Connect Transit	Improved communication, especially with institutions and private sector	Ongoing

Index No.	Type	Strategy No.	Metric	Target/ preferred result	Target Date
			regarding transportation needs and resources.		
39	A	1.6	Expand intergovernmental staff process to new topics and issues and enhanced coordination.		Ongoing
40	A	1.7	Develop the transportation section of the proposed technology plan		4/30/2018
41	A	1.8	Continue public, stakeholder and elected official education regarding fiscal resources through all available channels		Ongoing
42	O	1.8	Total annual program expenditures by mode for each government participating; include in dashboard report	Aggregated local government expenditures	Annual
43	O	1.9	From annual programmed Federal funding	Aggregated local government expenditures	Annual
44	O	1.9	From annual grants received from the State of Illinois	Aggregated local government expenditures	Annual
45	O	1.9	Include inventory of public information events and channels used in annual report	Evaluating effectiveness of outreach	Annual
46	A	1.10	Create and maintain database of illustrative project status, including studies, design and construction	As element of annual TIP revision	Annual
47	A	1.11	Create catalogue of new and emerging transportation technology and include in annual progress reports.	Awareness of changes in transportation; through MCRPC newsletter	Variable
48	O	1.12	Update and adopt City, Town and County access management ordinances		12/31/2018
49	O	1.12	Incorporate vehicle tracking capability in all publically owned vehicles		Variable
50	Ø	1.13	see 1.4, 1.12		
51	A	1.14	Support compact and transit-oriented development as called for in municipal comprehensive plans	Increased use of TOD	Ongoing
52	A	1.15	Expand access to person-powered transportation and transit to benefit community health and environmental sustainability	Increased sharing and safety enhancements	Ongoing
53	O	1.16	Update and maintain county-wide data regarding underserved areas in land use context; see 1.1, 2.12, Appendix X	Maintain high level of Title VI data	Ongoing
54	O	1.16	Include outreach to underserved communities in project selection process; see 1.1	Higher proportion of the underserved in project selection outreach	Ongoing

Index No.	Type	Strategy No.	Metric	Target/ preferred result	Target Date
Section 2: Mobility, Access and Choice					
55	A	2.1	Include data regarding the social and environmental aspects of transportation in the dashboard database, and report annually	base benchmark for system condition analysis	Annual
56	A	2.2	Monitor and catalogue the implementation of Complete Streets ordinances in Bloomington and Normal.	benchmark for system condition analysis	Annual
57	A	2.2	Provide data and other support as needed to facilitate pedestrian access and bicycle connectivity	benchmark for system condition analysis	Annual
58	A	2.2	Analyze impact of Complete Streets on connectivity and mobility, and report annually.	benchmark for system condition analysis	Annual
59	A	2.3	Maintain and expand Cube travel demand model, with input from stakeholders on modeling needs.	Upgraded model and responsive capabilities	Ongoing
60	O	2.3	Incorporate transit operations in the model.	Upgraded model and responsive capabilities	Ongoing
61	O	2.3	Incorporate freight traffic and locations in the model.	Upgraded model and responsive capabilities	Ongoing
62	O	2.3	Complete initial data gathering for Region 6 use of Sugar Access	Includes routes, service types and destinations	2/28/2018
63	A	2.3	Conduct access analysis regarding Connect Transit in areas with higher than average Title VI populations.	Maintain high level of Title VI data; benchmark for system condition analysis	Annual
64	O	2.4	Improve Connect Transit operations through support and funding for emerging technologies	Incorporate useful new technology where possible, and document	Ongoing
65	O	2.4	Adopt emerging technologies to improve paratransit safety and mobility	Incorporate useful new technology where possible, and document	Ongoing
66	A	2.4	Employ clean energy, improved vehicle design and service coordination to improve rural public transit, i.e. SHOW BUS	Incorporate useful new technology where possible, and document	Ongoing
67	A	2.5	Conduct transportation planning, especially for transit, to incorporate Transit Oriented Development as directed in the municipal comprehensive plans.		Ongoing
68	A	2.5	Expand coordination with Connect Transit regarding transit-supportive characteristics in redevelopment or new development.		Ongoing
69	O	2.6	Source alternative funding and support in kind for rural and urban public transit service.	Report specific outcomes	Annual
70	O	2.6	Seek public-private partnerships to expand transit service areas.	Report specific projects and outcomes	Ongoing

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71	O	2.7	Collaborate between MCRPC and Connect Transit to develop the first iteration of a 5-year strategic plan for CT.		6/01/2018
72	A	2.8	Expand public understanding of Complete Streets		Ongoing
73	A	2.8	Create and publically distribute informational materials regarding Complete Streets, through conventional and social media channels		Ongoing
74	O	2.9	Review program requirements regarding transportation services; record provisions in dashboard for reference		Annual
75	A	2.9	Coordinate with Transportation Advisory Committee and health department, Wellness Coalition, etc. to provide affordable transportation for health care needs.		Ongoing
76	A	2.10	Expand transit training programs in cooperation with LIFE-CIL, Marcfirst and other Transportation Advisory Committee participants; document for annual report		Ongoing
77	O	2.11	Encourage local governments to use their regulatory authority to guide decisions regarding transportation standards and practices.	Incorporate in municipal policy and guidance	6/30/2019
78	O	2.11	Establish policies supporting local standards	Incorporate in municipal policy and guidance	6/30/2019
79	A	2.12	Demonstrate local government commitment to using innovation to spark use of innovative transportation solutions		Ongoing
80	O	2.12	Create/expand car sharing availability		8/15/2018
81	A	2.12	Calculate transportation scores; see also §1.2	base benchmark for system condition analysis	6/30/2018
82	A	2.12	Outreach to the public regarding transit training options		Annual
83	A	2.12	Continue HSTP urban and rural coordination		Ongoing
84	A	2.13	Affirmatively include people protected by civil rights or disability inclusion laws in transportation planning process; document and report	Incorporate in public outreach	12/31/2017
85	O	2.13	Emphasize protections for people with disabilities and other civil rights compliance measures, document and report.	Incorporate in public and stakeholder outreach	12/31/2017

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Section 3: Health and Safety					
86	O	3.1	Establish a process for Vision Zero implementation		6/30/2018
87	O	3.1	Assist local governments in adopting Vision Zero		12/31/2018
88	O	3.2	Incorporate Vision Zero elements early in planning		4/31/2018
89	A	3.3	Emphasize safety for all users of all mode in reconstruction or new facilities; document and report specific projects	Incorporate in TIP project information	4/30/2018
90	A	3.4	Use MCRPC and participating agency resources to promote the health benefits of person-powered transportation options	Incorporate in public outreach	12/31/2017
91	A	3.5	MCRPC will promote system users' rights awareness across its channels of contact to the public, advocacy groups and local elected and appointed officials	Incorporate in public outreach, through agencies	
92	O	3.6	Expand safety training for bicycle users, pedestrians, children and senior drivers; document and report	With municipalities, SRTS, school districts, ECIAAAA, IL Sec. of State	8/31/2019
93	O	3.7	Inventory programs requiring coordination with law enforcement; document and report		Annual
94	O	3.7	Monitor law enforcement public information resources for users of non-motorized transportation; document and report	Incorporate in public outreach	Annual
95	A	3.9	Monitor accessibility of information, promotion and educational outreach regarding safety and health aspects of system elements is available and accessible to all; document discrepancies and corrections and report	Incorporate in public outreach	Annual
96	A	3.10	In creating and implementing programs regarding transportation safety and health aspects, involve disadvantaged groups or areas; document and report.	Incorporate in public outreach	6/30/2018

Index No.	Type	Strategy No.	Metric	Target/ preferred result	Target Date
Section 4: Sustainable Transportation					
97	O	4.1	Support the use of environmentally beneficial materials and techniques for use in the transportation system where feasible; document and report implementation	In cooperation with local governments	Ongoing
98	A	4.2	Document and publish air quality impacts from transportation over time	benchmark for system condition analysis	Annual
99	O	4.3	With the Ecology Action Center, monitor and report exposure to NAAQS-designated transportation-related contaminants; document and report	benchmark for system condition analysis	Annual
100	O	4.4	With the Ecology Action Center, monitor greenhouse gas emissions and documents and report results over time	benchmark for system condition analysis	Annual
101	O	4.4	Create a public information plan regarding contaminants and greenhouse gases and their effects, updated annually and reported.	In cooperation with EAC	6/30/2019
102	O	4.5	With BNWRD, monitor, document and report transportation system impacts due to stormwater runoff associated with the system or its elements	benchmark for system condition analysis	Annual
103	O	4.6	With BNWRD, monitor, document and report transportation system impacts on stormwater due to paved elements, mitigate, and monitor and report results.	benchmark for system condition analysis	Annual
104	O	4.7	Include environmental mitigation design for transportation in local regulations to the extent possible.	Coordinate with local governments; report	Annual
105	A	4.8	Obtain inventory of materials (i.e. pesticides, herbicides, fertilizers, etc.) and evaluate toxicity, possible alternatives, with Ecology Action Center; document and report	benchmark for system condition analysis	Annual
106	O	4.9	Continue to select sites for and build and maintain transportation elements to reduce impacts and where possible, mitigate those that occur.	Reporting by local governments.	Variable
107	A	4.10	Engage in ongoing public information about the environmental impacts of transportation and encourage the public to make environmentally sound transportation choices	Incorporate in public outreach	Ongoing
108	O	4.11	Where possible, use local authority to address environmental hazards to the transportation system due to private sector activity	Reporting by local governments.	Variable

Index No.	Type	Strategy No.	Metric	Target/ preferred result	Target Date
109	A	4.12	Encourage private sector entities to adopt sustainable fleet management practices	Incorporate in public outreach	Variable
110	O	4.13	With EAC, evaluate disparate transportation impacts on disadvantaged residents or neighborhoods (i.e. environmental justice issues); report findings	Create and publish environmental justice report; include in Title VI planning	Biennial
111	O	4.14	With local governments, EAC and BNWRD, evaluate whether allocation of fiscal resources for transportation environmental sustainability is done equitably across the community; report findings	Include in environmental justice report	Biennial

Index No.	Type	Strategy No.	Metric	Target/ preferred result	Target Date
Section 5: Freight					
112	O	5.1	Based on the final freight study report, identify the primary freight corridors to be included in the project prioritization framework and criteria.	Incorporate in project selection matrix	2/28/2018
113	A	5.1	Document pavement condition of primary freight corridors, and report.	base benchmark for system condition analysis	6/30/2018
114	O	5.1	Inventory/document weight restrictions on urban and rural classified system, urban truck routes and designated freight corridors	base benchmark for system condition analysis	6/30/2018
115	O	5.1	Consider revisions, if needed, to restrictions on urban and rural classified facilities.	Through intergovernmental group	Annual
116	O	5.2	Identify local and regional (200 mile radius) multimodal facilities	In consultation with Chamber	6/30/2018
117	O	5.2	Calculate distance and/or travel time (from Downtown Bloomington and Uptown Normal) to local and regional multimodal facilities	benchmark for system condition analysis	6/30/2018
118	O	5.2	Select variables for and estimate cost of transport to identified facilities	benchmark for system condition analysis	6/30/2018
119	O	5.2	Identify quantity and location of freight-oriented land use in the MPA and rural McLean County; update and report as needed	benchmark for system condition analysis	1/31/2018
120	A	5.3	Monitor applicability of freight congestion performance measure requirement to small MPOs.		Variable
121	A	5.3	Annually review potential congestion indicators with Technical Committee and consider action in response to findings	base benchmark for system condition analysis	Annual

Federal Planning Factors

Figure 6.1 Index of FAST Act Planning Factors

§	Planning Factor from FAST Act
A	Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
B	Increase the safety of the transportation system for motorized and non-motorized users;
C	Increase the security of the transportation system for motorized and non-motorized users;
D	Increase the accessibility and mobility of people and for freight;
E	Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
F	Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
G	Promote efficient system management and operation;
H	Emphasize the preservation of the existing transportation system;
I	Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
J	Enhance travel and tourism.