



IDOT: Group TAM Plan for Participating Tier II Agencies

September 2018

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Accountable Executive Approvals

Version	Date	Description	IDOT Approval
V1	09/20/2018	Final IDOT Group TAM Plan (1 st generation)	John Marrella, Bureau Chief, Transit Operations

Grantee Name	Accountable Executive	Approval	Date
Bloomington-Normal	Isaac Thorne	✓	9/27/2018
Bond County	Jill Jones	✓	9/27/2018
Boone County	Joe Fortmann	✓	9/27/2018
Bureau County	Beth Nickel	✓	9/26/2018
Carroll County	Mary Maszk	✓	9/26/2018
Champaign County	Debra Busey	✓	9/28/2018
Champaign Urbana MTD	Karl Gnad	✓	9/26/2018
City of Danville	Lisa Beith	✓	9/25/2018
City of Decatur	John Williams	✓	9/26/2018
City of DeKalb	Marcus Cox	✓	9/26/2018
City of Freeport	Lowell Crow	✓	9/26/2018
City of Galesburg	Wayne Carl	✓	9/21/2018
City of Macomb	Nathan Cobb	✓	9/24/2018
City of Ottawa	Alaina Rivers	✓	9/21/2018
City of Quincy	Marty Stegeman	✓	9/19/2018
Coles County	Patricia Hicks	✓	9/27/2018
CRIS Rural MTD	Amy Brown	✓	9/27/2018
DeKalb County	Paul LaLonde	✓	9/19/2018
Douglas County	Patricia Hicks	✓	9/27/2018
Effingham County	Susan A. Love	✓	9/25/2018
Fulton County	Shelly Entrekin	✓	9/24/2018
Greater Peoria MTD	Douglas Roelfs	✓	9/21/2018
Grundy County	Sherey Zerbian	✓	9/24/2018
Hancock County	Nathan Cobb	✓	9/24/2018
Henry County	Kim Walker	✓	9/21/2018
Jackson County MTD	Jimmy Leadingham	✓	9/27/2018

Grantee Name	Accountable Executive	Approval	Date
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Jo Daviess County	Kathleen Gable	✓	9/27/2018
Kankakee County	Andrew Wheeler	✓	9/26/2018
Kendall County	Michael Neuenkirchen	✓	9/19/2018
Lee County	Kari Wolfe	✓	9/27/2018
Logan County	Charles Ruben	✓	9/21/2018
Macoupin County	Kent Tarro	✓	9/27/2018
Madison County MTD	Jerry Kane	✓	9/26/2018
McLean County	John McIntyre	✓	9/25/2018
Marshall County	Gary Kroeschen	✓	9/27/2018
Monroe Randolph MTD	Jesica Gentry Schlimme	✓	9/26/2018
Peoria County	Andrew Dwyer	✓	9/24/2018
Piatt County	Christina Smith	✓	9/26/2018
River Valley Metro MTD	Robert Hoffman	✓	9/21/2018
Rock Island County	Mariela Trevino	✓	9/27/2018
Rock Island County Metro MTD	Jeff Nelson	✓	9/19/2018
Rockford MTD	Michael Stubbe	✓	9/21/2018
Sangamon County	Kate Downing	✓	9/26/2018
Sangamon MTD	Frank Squires	✓	9/20/2018
Shawnee MTD	Shawn Freeman	✓	9/21/2018
Shelby County	Susan A. Love	✓	9/25/2018
South Central MTD	Sheila Niederhofer	✓	9/21/2018
Stateline MTD	Sharon Hecox	✓	9/21/2018
Tazewell County	J David Zimmerman	✓	9/27/2018
Warren County	Robert Ray	✓	9/26/2018
West Central MTD	R Jean Jumper	✓	9/21/2018
Whiteside County	Vitoria McDaniel	✓	9/26/2018
Woodford County	Debbie Harms	✓	9/27/2018

Acronyms and Abbreviations

AIM	Asset Inventory Module
CNA	Capital Needs Assessment
DOT	Department of Transportation
FTA	Federal Transit Administration
FY	Fiscal year
IDOT	Illinois Department of Transportation
IPTA	Illinois Public Transit Association
ISO	International Organization for Standardization
ITS	Intelligent Transportation Systems
MAP-21	Moving Ahead for Progress in the 21st Century
MCDA	Multi-Criteria Decision Analysis
MPO	Metropolitan Planning Organization
NTD	National Transit Database
O&M	Operating and Maintenance
RTAC	Rural Transit Assistance Center (Illinois)
SGR	State of Good Repair
TAM (TAMP)	Transit Asset Management (Transit Asset Management Plan)
TERM	FTA's Transit Economic Requirements Model
TERM Lite	Local agency version of TERM
ULB	Useful life benchmark
YOE	Year of Expenditure

1.0 Introduction

1.1 Evolution of Asset Management in Downstate Illinois

Facing aging infrastructure and increased regulations and requirements, the Illinois Department of Transportation (IDOT), Illinois Public Transit Association (IPTA), and Rural Transit Assistance Center (RTAC) at Western Illinois University came together more than a decade ago to begin forecasting public transit needs in Downstate Illinois (defined as Illinois, exclusive of the Chicagoland metropolitan area).

Each year, RTAC runs a Capital Needs Assessment (CNA), which surveys agencies across the state on their revenue vehicles, stations, administrative and maintenance facilities, and guideway infrastructure to compile a comprehensive capital asset inventory. This inventory represents the transit assets of all 56 rural, small urban, and urban agencies providing transit services outside of Chicago.

Analysis of this inventory in the CNA model allows IDOT leadership to estimate Downstate transit needs for the next 10 years and has aided their advocacy for transit infrastructure improvements since 2002. The CNA model also determines the current state of good repair (SGR) backlog for transit in Downstate Illinois, similar to the estimates the Federal Transit Administration (FTA) provides for nationwide transit to the US Congress in the *Conditions and Performance Reports*.

IDOT, IPTA, and RTAC began implementing improvements to the CNA survey and model in 2016 to reach Moving Ahead for Progress in the 21st Century (MAP-21) compliance for all Illinois Tier II agencies¹. The cooperative work done during the past decade to develop the inventory and tools used in the CNA is the basis for good transit asset management practices statewide and gives Illinois a head-start in complying with MAP-21 requirements.

IDOT, IPTA, and RTAC also support training for all IDOT sub-recipients (referred to collectively as grantees) in the region to help them comply with new processes, including assisting grantees to improve their detailed annual inventory reports to meet new National Transit Database (NTD) reporting Asset Inventory Module (AIM) and performance reporting requirements and support for conducting facility condition assessments.

1.2 FTA Requirements for Group TAM Plans

The National Transit Asset Management System Final Rule (49 U.S.C. 625) requires all agencies that receive federal financial assistance under 49 U.S.C. Chapter 53 and own, operate, or manage capital assets used in the provision of public transportation to create a Transit Asset Management (TAM) Plan. Agencies can meet this requirement either through an Individual or Group TAM Plan. Group TAM Plans are meant to collect TAM information about groups (typically smaller subrecipients of 5311 or 5310 grant programs) that do not have a direct financial relationship with FTA.

IDOT, IPTA, and RTAC cooperatively supported the development of Illinois' Group TAM Plan for all Tier II agencies. This state-level plan includes the four required elements for MAP-21 compliance, leveraging the current and historic CNA work to develop:

1. An inventory of capital assets, including all assets already reported through the CNA annual survey process

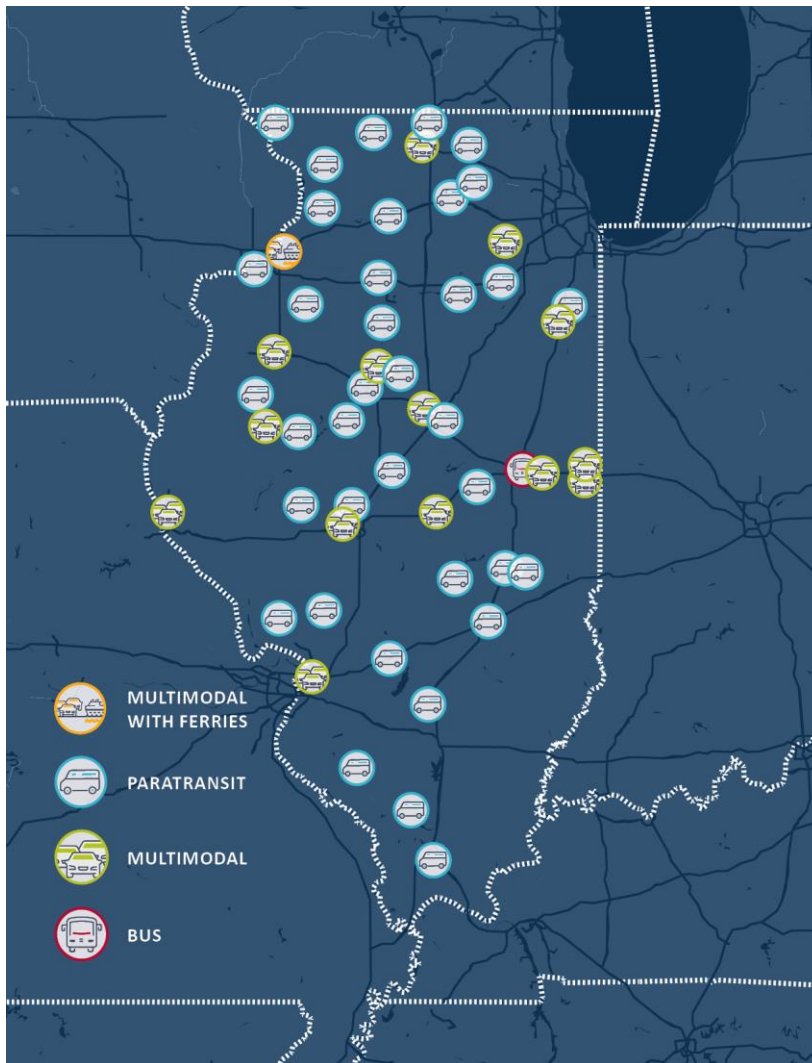
¹ Definitions of MAP-21 and agency tiers are provided in the Glossary.

2. A condition assessment, including conditions estimated by the existing CNA model and new facility condition assessments being done by grantees
3. A decision support tool, through modification of the existing CNA model
4. Investment prioritization, including grantee input on prioritizing transit investments utilizing the improved data available in the annual CNA process and modified CNA model

1.3 Group Plan Participants

This document covers the 54 Illinois-based Tier II agencies that opted to participate in the Group TAM Plan, illustrated below in Figure 1.1. The participating agencies include a mix of small urban and rural agencies, some of which also offer enhanced mobility service. Moreover, the plan covers 54 of the 56 transit agencies that have worked collectively with IDOT since 2002 to document transit asset holdings and capital reinvestment needs for the Downstate Illinois region.

Figure 1.1 Map of All Participating Agency Locations and Modes Served



A full list of the 54 participating agencies, including agency name, city location, primary federal funding source (5307, 5311), and annual ridership by mode (for 2017) is provided in Appendix 2. A summary of the key characteristics of the Group Plan agencies—including the number of agencies by funding type

and annual ridership (boardings) by mode—is provided in Figure 1.2. Together, these agencies provide more than 33 million trips per year in Illinois. A vast majority of those trips are supported by fixed-route bus services.

Figure 1.2. Characteristics of Group Plan Participants

Agency Type	Count	Annual Ridership (2017)				
		Bus	Paratransit	Vanpool	Water Taxi	Total
Small Urban (5307)	13	27,757,843	841,581	108,507	43,584	28,751,515
Rural (5311)	41	1,914,465	2,347,909			4,262,374
Total	54	29,672,308	3,189,490	108,507	43,584	33,013,889

1.4 TAM Goals and Objectives

IDOT’s mission statement is as follows:

“The mission of IDOT is to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity, and demonstrate respect for our environment. We will accomplish our mission while making the following principles the hallmark of all our work: Safety, Integrity, Responsiveness, Quality, and Innovation. The vision of IDOT is to be recognized as the premier state department of transportation in the nation.”

Asset management is defined in the *International Organization for Standardization (ISO) 55000 standard* as, “the coordinated activity of an organization to realize value from assets.” Realization of value normally involves the balancing of costs, risks, opportunities, and performance benefits while tying investment priorities to an agency’s goals, objectives, and overall mission.

Given this understanding, IDOT intends to integrate the MAP-21 TAM requirements into its pre-existing asset management practices with the aim of realizing the optimal value from assets to best fulfill its mission statement.

1.5 Roles and Responsibilities

While IDOT is the Group TAM Plan sponsor, RTAC is assisting in the coordination of participating agencies through the ongoing CNA process. IPTA also provides support by coordinating discussions with agencies via IPTA conferences and IPTA Board meetings.

IDOT has a long working relationship with RTAC. For the past 16 years, IDOT and RTAC have jointly conducted the annual CNA process for all transit agencies in the Downstate Illinois region, including both Tier I and Tier II agencies. The CNA program includes the collection of capital asset data from all 54 of the Group TAM Plan participants (as well as those of two Tier I Downstate agencies) and the assessment of capital needs using the CNA model (a decision support tool developed to meet the specific needs of IDOT, RTAC, and the Downstate agencies). Specifically, the CNA process was originally designed to:

- Document all Downstate Illinois transit assets in a regional asset inventory
- Document all proposed expansion investments
- Assess *unconstrained* Downstate Illinois capital reinvestment and expansion needs for the upcoming 10-year period

Beginning with this Group TAM Plan, the CNA process has been expanded to include an assessment of capital funding capacity for the Downstate Tier II agencies, and the resulting assessment of constrained and prioritized reinvestment needs.

IDOT, as the Group TAM Plan sponsor, serves as the primary author of the TAM Plan and coordinator of all activities supporting the development of the TAM Plan. IDOT also coordinates and prepares the annual performance targets, which are submitted to the NTD, separate from the Group TAM Plan.

RTAC assists IDOT in coordinating with participants by communicating TAM policies and responsibilities directly with Group TAM Plan participants, including hosting webinars and sessions during annual conferences on updates to the CNA process.

All Group TAM Plan participants also are grantees who participate in the annual CNA process. They are required to provide asset inventory data and estimates for expansion needs through the survey tool. They also review the CNA model reports annually and make corrections as needed in backlog and future needs projections.

In 2018, Group TAM Plan participants were required to submit a signed declaration of intent to participate in the TAM Plan and to name an Accountable Executive. Accountable Executives are required to approve the final Group TAM Plan and are encouraged to participate in as much of the TAM Plan coordination as possible. In the absence of Accountable Executives, agency support staff are encouraged to participate.

These TAM roles and responsibilities are summarized in Figure 1.3. The matrix also includes the timeframe for these activities, whether annual/ongoing or periodic.

Figure 1.3. RACI Matrix for Downstate Illinois TAM Activities

TAM Activity	Timeframe	IDOT	RTAC	IPTA	Participating Agencies
Coordinate Group TAM Plan	Minimum every 4 years	R	C	C	C
Approve Group TAM Plan	Minimum every 4 years		R		A
Coordinate Aggregate SGR Performance Targets	Annual	A	R		C
Submit Aggregate Group SGR Targets to NTD AIM (for all participants)	Annual	R			
Draft Narrative Performance Report and Submit to NTD	Annual	R	C		C
Submit inventory data to NTD AIM	Annual				R
Update CNA Survey Form/Model	Annual	C	R		
Complete CNA Survey	Annual		A		R
Update CNA Model	Annual	I	R		C
Submit CNA Reports to IDOT	Annual		R		C
Host TAM Update Sessions/Webinars	As needed	C	R	R	C

R = Responsible, A = Approver, C = Consulted, I = Informed

In addition to the actions listed above, IDOT is also responsible for sharing the Group TAM Plan with relevant Metropolitan Planning Organizations (MPO) when updates are made. However, individual agencies are responsible for sharing performance data with their partner MPOs annually.

1.6 Group Plan Content

Under FTA requirements, individual agency TAM Plans must address nine requirements as outlined in Figure 1.4; however, as Tier II agencies, the 54 agencies included in this Group TAM Plan are only required to address the first four of these requirements. To that end, the remaining chapters of this Group TAM Plan are designed to specifically address the group’s approach and analyses to address each of these individual requirements, with one chapter per requirement. IDOT has also included a list of key annual activities for maintaining this plan in Chapter 6.

Figure 1.4. Group TAM Plan Requirements

Tier	TAM Plan Requirements
Tier I & II	<ol style="list-style-type: none"> 1. Inventory of Capital Assets (Chapter 2) 2. Condition Assessment (Chapter 3) 3. Decision Support Tools (Chapter 4) 4. Investment Prioritization (Chapter 5)
Tier I Only	<ol style="list-style-type: none"> 5. TAM and SGR Policy 6. Implementation Strategy 7. List of Key Annual Activities (Chapter 6) 8. Identification of Resources 9. Evaluation Plan

2.0 Capital Asset Inventory

2.1 Data Collection

IDOT collects capital asset inventory data through its annual CNA process. Subrecipients of federal funds submit a survey of their transit capital asset holdings to IDOT annually. The survey includes existing asset information for vehicles (revenue and non-revenue), facilities, and equipment. Subrecipients also report planned replacements and expansions.

The CNA surveys have been adjusted to assure that all MAP-21 and pending NTD reporting requirements are fully addressed. The updates include capturing FTA facility and vehicle types, capturing additional data such as vehicle length and standing capacity, and allowing users to enter their own useful life benchmarks (ULBs) for vehicles. A snapshot of the facility input form from the CNA survey is shown in Figure 2.1.

Figure 2.1. CNA Survey: Facility Input Example

Please Complete all Sections Highlighted in White

Facility #1

Please complete one form for each maintenance, admin and passenger facility in use.
If additional forms are required, please make copies of this worksheet

Facility Description	
Name	Wylie Drive Facility
Function (Admin, Maintenance, Combo)	Admin
Street Address	351 Wylie Drive
City	Normal
State	IL
Zip Code	61761
Year Built	2010
Size (Sq feet)	20,000
Percent Transit Capital Responsibility	100.0%
Mode(s) Served	Fixed Route & Paratransit
Leased? (Yes/No)	No
Condition Rating (1-5 Scale)	4
Condition Rating Date	11/1/2017
Is Facility Scheduled for Replacement? If "Yes", when?	No

An example of how to complete this form is provided on the worksheet.

FTA Condition Rating Scale		
Rating	Condition	Description
5	Excellent	No visible defects, new or near n
4	Good	Good condition, but no longer ne
3	Adequate	Moderately deteriorated or defect
2	Marginal	Defective or deteriorated compon
1	Poor	Critically damaged component(s)

Additional information on facilities condition reporting can be found in:

Facility Rehabilitation History (do not complete section if facility is leased or if grantee has no responsibility for capital improvements)				
Component	Most Recent Major Facility Renovation			
Example: Building Structure	Activity	Description	Date	Est. Cost
Equipment	0, Original investment (<5% rebuild/replacement)	Generator	2014	\$250,000
Building Structure	0, Original investment (<5% rebuild/replacement)	Finish 3,000sf	2015	\$164,000

All CNA survey data are stored in IDOT’s CNA tool. The CNA tool is an MS Access-based decision support tool that acts as a repository for all data collected through the CNA process. In addition, the CNA tool is also used to model Downstate Illinois transit capital investment needs for the upcoming 10-year period (as described further in the following sections).

2.2 Asset Inventory

As noted previously, each of the 54 plan participants submits a listing of their transit asset holdings—including fleet, facilities, and equipment—to RTAC on an annual basis. The following tables and charts summarize the major asset inventory holdings of the 54 plan participants as of Fall 2017, focused on fleet and facilities assets.

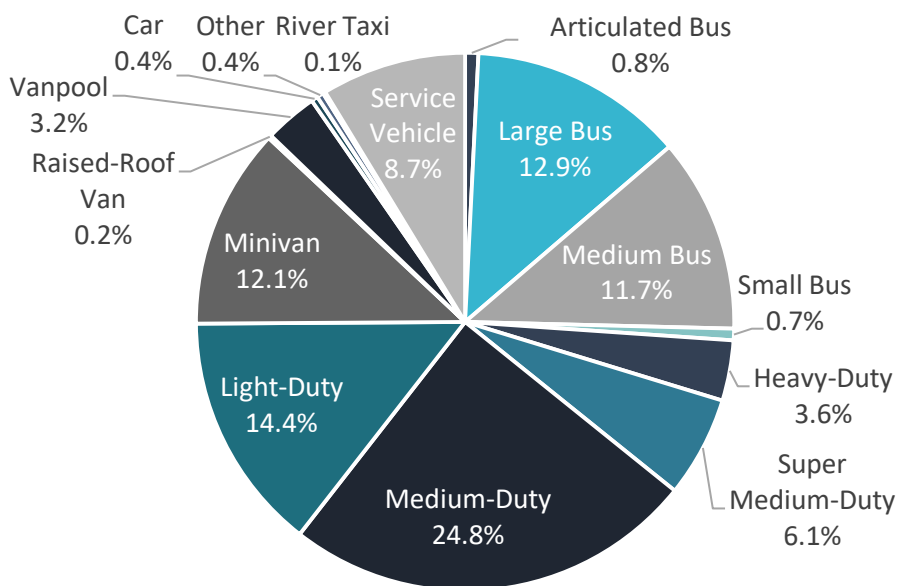
2.2.1 Fleet

Figure 2.2 and Figure 2.3 present the fleet holdings for the 54 agencies included in this Group TAM Plan. These holdings—which include a range of bus, minibus, minivan, van, auto, and other vehicle types—is very much consistent with the mix of small urban and rural agencies that make up the group. Perhaps less typical are the three river taxi vehicles operated by the Rock Island County Metro Mass Transit District. As of the fall of 2017, the combined group fleet—including service vehicles— totaled over 2,000 vehicles. Most of the fleet provides revenue service, with 1,837 vehicles serving Illinois passengers.

Figure 2.2. Group Plan Agencies: Fleet Composition – Counts

Vehicle Types		Count
Bus	Articulated Bus	16
	Large Bus	260
	Medium Bus	235
	Small Bus	14
Minibus	Heavy-Duty	73
	Super Medium-Duty	122
	Medium-Duty	498
	Light-Duty	289
Minivan	Minivan	243
Van	Raised-Roof Van	4
	Vanpool	64
Automobile	Car	8
Other	Other	8
Ferry	River Taxi	3
Non-Revenue	Service Vehicle	175
Total		2,012

Figure 2.3. Group Plan Agencies: Fleet Composition – Distribution by Quantity



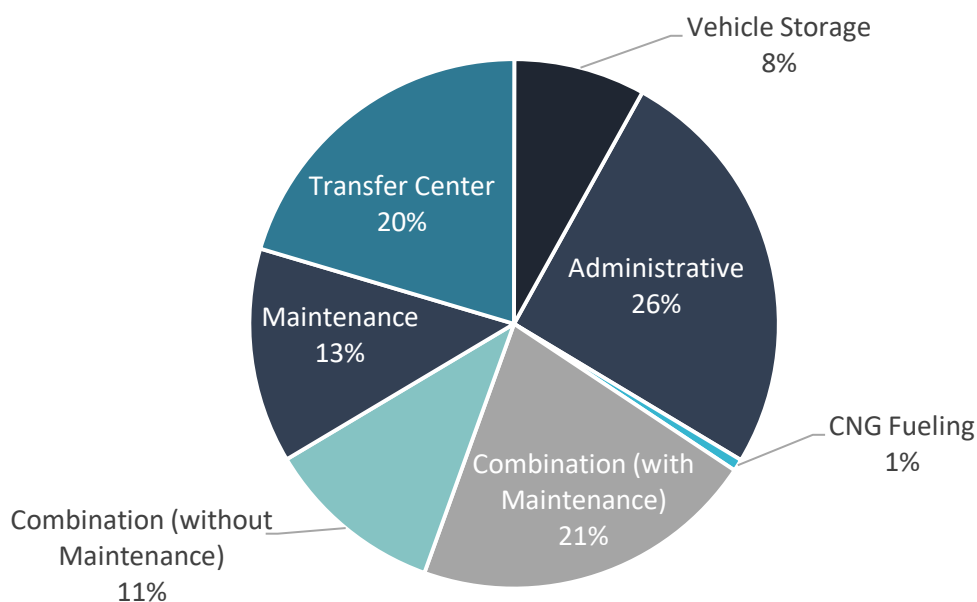
2.2.2 Facilities

Figure 2.4 and Figure 2.5 present the number of facility holdings that supported Group Plan operations—including a mix of administrative, maintenance fueling, fleet storage, and passenger transfer centers. It is important to note that many of the facilities included in these counts are not exclusively devoted to transit, with many administrative and maintenance facilities supporting other town and city services. As of the fall of 2017, the combined group relied on 137 facilities to support their transit services; however, the Group Plan agencies only have capital responsibility for 122 of these 137 facilities due to leasing of facilities.

Figure 2.4. Group Plan Agencies: Facility Types – Counts

Facility Type	Count
Administrative	35
CNG Fueling	1
Combination (e.g., admin, storage) with Maintenance	29
Combination (e.g., admin, storage) without Maintenance	15
Maintenance	18
Transfer Center	28
Vehicle Storage	11
Grand Total	137

Figure 2.5. Group Plan Agencies: Facility Types – Distribution by Quantity



2.2.3 Other Asset Types

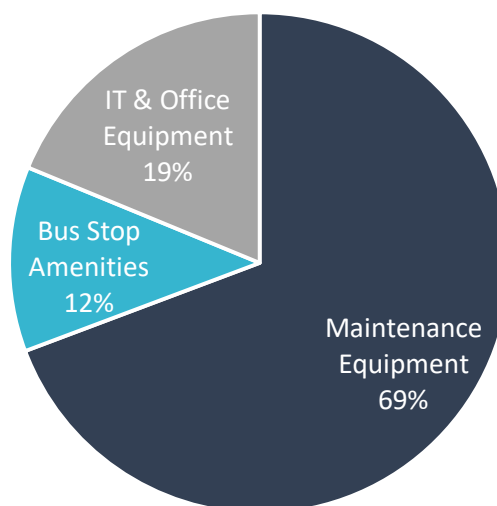
There are two additional asset types collected in the annual CNA survey: equipment and intelligent transportation systems (ITS). For the 2017 CNA survey, a minimum threshold value of \$3,500 per asset was implemented to match IDOT's audit definition of capital assets in these categories.

2.2.3.1 Equipment

Equipment is defined as facility-based equipment that supports maintenance or administrative activities. Tier II agencies reported 5,812 Equipment assets. The primary types of equipment in inventory include:

- Maintenance Equipment
 - Brake lathes
 - Bus washers
 - Dynamometers
 - Fuel islands
 - In-ground lifts
 - Maintenance equipment
 - Mobile equipment
 - Overhead cranes
 - Vehicle paint booths
 - Wheel truing machines
- Bus Stop Amenities
 - Bus stop signs
 - Passenger shelters and benches
- IT and Office Equipment
 - Computers and software
 - Faxes, copiers, printers, phones, etc.

Figure 2.6. Group Plan Agencies: Equipment – Distribution by Value



In total, equipment is valued at just over \$12.6 million (in 2018 dollars) across the 54 participating agencies. The majority of these assets support maintenance activities, as shown in Figure 2.6.

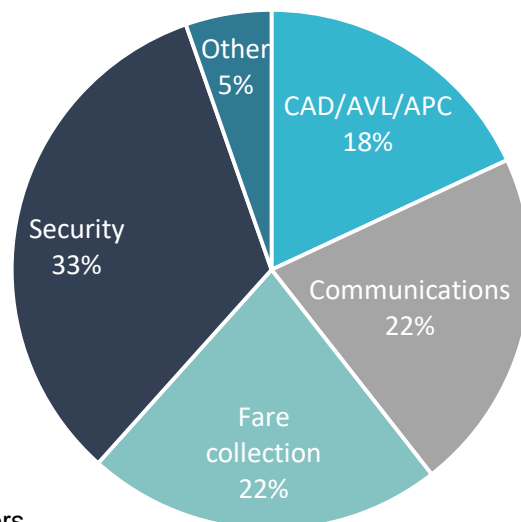
2.2.3.2 ITS

ITS assets are systems assets that support critical functions for each agency, such as fare collection, dispatch, communications, and security monitoring. Similar to the equipment listed above, these assets are distributed across multiple categories, including:

- Computer-Aided Dispatch (CAD)
- Automatic Vehicle Location (AVL)
- Automatic Passenger Counters (APC)
- Communications
 - Radios

- Passenger information displays
- Public address systems
- Security
 - Closed-circuit television (CCTV) systems
 - Intrusion and fire detection
- Fare Collection
 - Fareboxes
 - Currency counters
 - Vaults
 - Smartcard readers and encoders
- Other ITS asset types, such as support software and servers

Figure 2.7. Group Plan Agencies: ITS – Distribution by Value



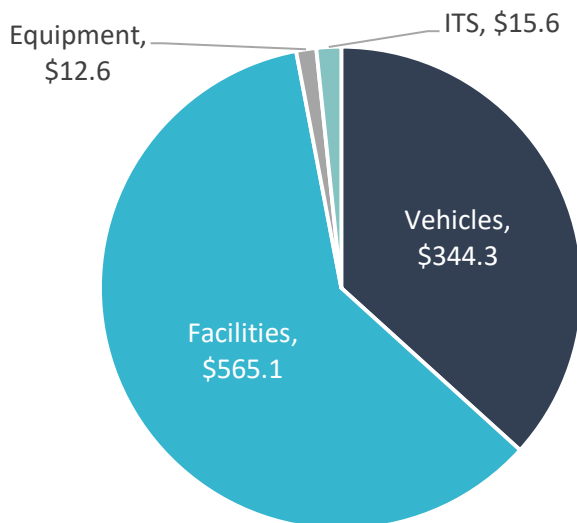
In total, just over 2,125 ITS assets were reported in the 2017 CNA inventory. These ITS assets are valued at approximately \$15.6 million (in 2018 dollars). As shown in Figure 2.7, one-third of these assets are dedicated to security monitoring primarily through CCTV systems. About one-quarter each is dedicated to fare collection and communications systems.

2.3 Inventory Summary

The Downstate region of Illinois represents a significant investment in regional mobility, with nearly \$1 billion (in 2018 dollars) in transit assets across the Tier II agencies participating in this plan. Nearly 10,000 transit assets serve diverse communities and support multiple modes of transportation.

As shown in Figure 2.8, the majority of the value of transit assets is seen in facilities (administrative, maintenance, vehicle storage, passenger transfer centers, etc.). It is important to note that agencies do not report facility values to IDOT through the CNA survey, so the value of facilities are estimates based on the size, IDOT per square foot costs, and percent of transit use/responsibility. The estimate for vehicles is similarly based on IDOT cost schedules for vehicles replacements.

Figure 2.8. Group Plan Agencies: Total Transit Asset Inventory Distribution – by Value (\$2018)



3.0 Condition Assessment

The condition assessment information listed in this section matches the information used for Fiscal Year 2019 (FY2019) performance target-setting.

3.1 Methodology

Separate methodologies were applied to facilities and vehicles. Condition ratings were used for facilities, while a comparison of age to ULB was used for vehicles. Regardless of the methodology, all assets are rated on the FTA 1 to 5 scale, where 1 is poor and 5 is excellent (as illustrated in Figure 3.1). With this rating system, a score of 2.5 represents the end of useful life. Any asset below a 2.5 is not considered to be in SGR.


Figure 3.1. FTA Condition Rating Scale

Condition	FTA Rating	Description
Excellent	5	<ul style="list-style-type: none"> New asset No visible defects
Good	4	<ul style="list-style-type: none"> Asset showing minimal signs of wear Some (slightly) defective or deteriorated component(s)
Adequate	3	<ul style="list-style-type: none"> Asset has reached mid-life (3.5) Some defective or deteriorated component(s)
Marginal	2	<ul style="list-style-type: none"> Asset reaching or just past the end of useful life (2.75 to 2.5) Increasing number of defective or deteriorated component(s) and increasing maintenance needs
Poor	1	<ul style="list-style-type: none"> Asset is past useful life and is in need of immediate repair or replacement May have critically damaged components

3.1.1 Facilities

All facilities for which participants have a direct capital responsibility must be assessed every four years. Agencies are required to assess their own facilities, and IDOT is supporting these efforts. IDOT’s support includes hosting a webinar on facility condition assessment requirements and best practices. Additionally, facility condition assessment forms were created for administrative/maintenance and passenger/parking facilities. The administrative/maintenance form cover sheet is shown in Figure 3.2.

Figure 3.2. Facility Condition Assessment Form Cover Page



Illinois Department of Transportation

ADMIN / MAINTENANCE FACILITY ASSESSMENT FORM

Facility Name: <i>Connect Transit Maintenance Facility</i>		Inspector(s): <i>Brady Lange & Kurt Kisandi</i>	
Street Address: <i>351 Wylie Dr, Normal, IL</i>			
(a)	Inspection Date: <i>4/27/18</i>		
(b)	Year of Construction: <i>2010</i> <small>[Populate before inspection]</small>		
(c)	Age (a)-(b): <i>8</i>	Notes:	
Year of Major Renovations: <i>[enter short format date, mm/dd/year]</i> <small>[Populate before inspection]</small>			
Building Gross Area:	<i>[estimate sq ft]</i>	Sq. Ft.	Site Area: <i>[estimate sq ft]</i> Sq. Ft.
# of Floors:	<i>2</i> Count	# of Revenue Vehicles Served:	<i>60</i> Count

Asset Condition Ratings — General*

Rating	Condition	Description
5	Excellent	No visible defects, new or near new condition, may still be under warranty if applicable
4	Good	Good condition, but no longer new. Some (slightly) defective or deteriorated component(s) - but is overall functional
3	Fair	Moderately defective or deteriorated component(s); but has not exceeded useful life Some asset types may be expected to have a condition of 3.0 or higher as a minimum standard acceptable condition (conditions below a 3 are highlighted in data form for review).
2	Marginal	Defective or deteriorated component(s) in need of replacement; exceeded useful life Condition 2 indicates asset (or significant portion of an asset) is close to, or in need of, rehab/replacement and should be considered a pending investment need. While the majority of an asset may be in good condition, inspector should select condition 2 if a sufficient proportion of the asset is in condition 2 to indicate that a reinvestment/repair action is warranted.
1	Poor	Critically damaged or in need of immediate repair; well past useful life - priority for rehab or replacement

Refer to Appendix B of the FTA Condition Assessment Calculation Guidebook for detailed scoring guidance by asset type ([link is to the right](#))

If unsure between two ratings, mark the lower score and describe in notes.

Mark "N/A" if a Sub-Component is not present at the site.

[Guide-book](#)

The facility condition assessment form helps facilitate assessing and rating facility components on the FTA 1 to 5 scale and aggregating components to a facility-level score. The form allows agencies to pick the component-weighting approach that best fits their facility. Agencies were asked to submit their condition assessments to RTAC to be kept on file. Additionally, agencies can enter their facility condition rating and the date of the assessment in their annual CNA survey.

Not all agencies were able to physically assess their facilities in 2018. Agencies are aware that they must assess their facilities at least once during the quadrennial period beginning in 2018. In the absence of physical condition data, an age-based condition rating was calculated using the CNA model. The age-based assessment was calculated in one of the following ways:

1. If facility component data was provided, components were assigned an age-based rating. Components were then aggregated to a facility-level condition rating using a weighted average based on component value.
2. If no component data was provided, a facility-level condition score was calculated using the building build date and an assumed 50-year useful life. Straight-line depreciation was assumed, with the conclusion of the 50-year useful life corresponding with a condition rating of 2.5.

Agencies were allowed the opportunity to correct age-based condition ratings. If they did not agree with the age-based score, they were asked to provide an alternative score and justification for using the alternative score.

Lastly, there is one additional component that factors into performance target-setting: agencies are asked to provide plans for facility capital investments to be completed during the next year. These include facility replacement, rehabilitation, and demolition. These plans are combined with the existing inventory data to estimate the facility condition at the conclusion of the next fiscal year.

3.1.2 Vehicles

Agencies report their revenue and non-revenue vehicles inventories annually through their CNA survey. Each vehicle record must include the in-service year, type, ULB, and whether it is active or inactive, among other data. This data is used to calculate whether vehicles are within or at/beyond their ULBs.

For performance target-setting, CNA inventory data is combined with agency vehicle procurement plans to estimate which vehicles will be within or at/beyond their ULBs at the conclusion of the next fiscal year.

3.2 Schedule

In accordance with FTA requirements, the facilities in which Group Plan agencies have capital replacement responsibility will be physically assessed at least once every four years, with the expectation that facilities will be assessed on a more frequent (annual or biennial) basis. Vehicle conditions will be assessed annually as part of the annual CNA and TAM performance target-setting.

3.3 FY2019 Performance Targets

Under FTA's Final Rule, grantees are required to track current performance and establish performance targets based on the measures outlined in Figure 3.3. This section presents the performance targets for the Group Plan agencies based on these definitions for FY2019.

The FTA provided specific guidance in the final rule that SGR performance targets must be:

“...based on realistic expectations, and both the most recent data available and the financial resources from all sources that the provider reasonably expects will be available during the TAM plan horizon period.” – § 625.45

Therefore, the annual process to set targets for the Group Plan agencies is based on current levels of performance and realistic plans for replacement or rehabilitation of assets over the next FY. The process to produce the FY2019 performance targets includes the following steps:

1. Collect vehicle and facility data as part of the annual CNA process
2. Produce preliminary performance targets reports
3. Provide preliminary reports to participants for review
4. Apply any corrections and *planned* capital investments/disposals to existing inventory data
5. Produce updated performance targets
6. Provide draft performance targets to IDOT and RTAC for review
7. Incorporate any additional feedback and finalize FY2019 performance targets
8. Submit final FY2019 performance targets to NTD

At this time, steps 1–7 are complete. The final step, submitting the performance targets to the FTA through the NTD, must be completed by October 1, 2018.

Figure 3.3. FTA Performance Measure Definitions

Asset Type	Definition
Facilities	The percentage of facilities within an asset class and for which agencies have capital rehab and replacement responsibility, rated below condition 3 on the FTA TERM scale
Rolling Stock (Revenue Vehicles)	The percentage of revenue vehicles by asset class that either meet or exceeded their Useful Life Benchmark (ULB)
Equipment (Service Vehicles)	The percentage of non-revenue, support-service and maintenance vehicles that either meet or exceeded their ULB

3.3.1 Final FY2019 Performance Targets

The final FY2019 facilities performance targets for facilities, revenue vehicles (rolling stock), and non-revenue vehicles (equipment) are presented in Figure 3.4, Figure 3.5, and Figure 3.6, respectively.

Figure 3.4. FY2019 Facilities Performance Targets

Facility Type	Facilities Rated Below 3.0	Total Facilities	% Rated Below 3.0
Admin/Maintenance	15	87	17%
Passenger/Parking	4	35	11%
Total	19	122	16%

Figure 3.5. FY2019 Revenue Vehicles (Rolling Stock) Performance Targets

Vehicle Type	# of Vehicles At/Beyond ULB	Total Vehicles	% Vehicles At/Beyond ULB
Articulated bus	12	16	75%
Automobile	8	8	100%
Bus	160	526	30%
Ferryboat	3	3	100%
Minibus	82	171	48%
Minivan	163	243	67%
Other	8	8	100%
Van	447	852	52%
Total	883	1,827	48%

Figure 3.6. FY2019 Non-Revenue Vehicles (Equipment) Performance Targets

Vehicle Type	# of Vehicles At/Beyond ULB	Total Vehicles	% Vehicles At/Beyond ULB
Automobile	52	112	46%
Other rubber tire vehicles (including minivans and vans)	34	60	57%
Total	86	172	50%

4.0 Decision Support Tool

FTA defines decision support as an analytic process or methodology to help accomplish the following objectives:

1. Help prioritize projects to improve and maintain the state of good repair (SGR) of capital assets within a public transportation system, based on available condition data and objective criteria
2. Assess financial needs for asset investments over time

For the past 16 years, the CNA model has been applied on an annual basis for IDOT to assess the current and future capital needs of all Downstate Illinois grantees. IDOT chose to leverage this existing model to address the objective of investment prioritization as well. Starting in 2018, the model has been updated to include the investment prioritization approach summarized in Section 5.

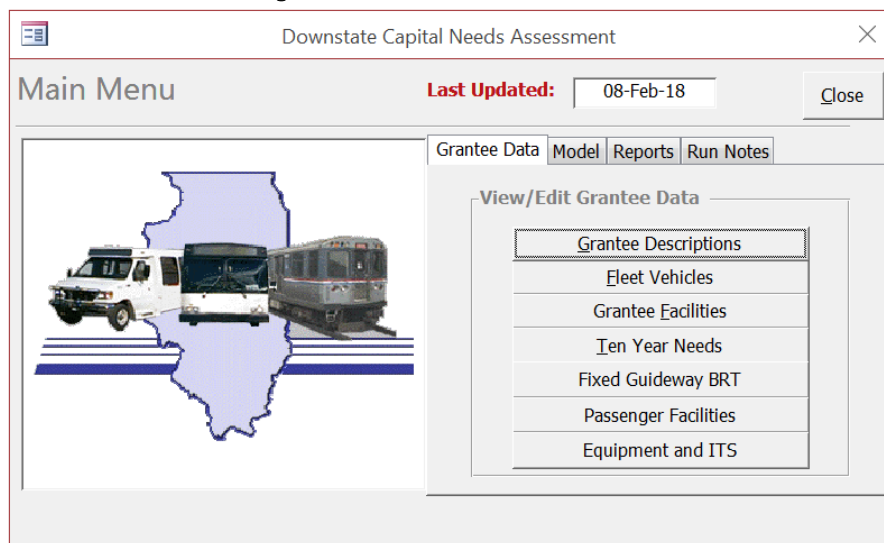
4.1 CNA Model

IDOT initiated the development and use of the CNA model in 2002. The model was designed and developed by many of the developers of the FTA Transit Economic Requirements Model (TERM) and TERM Lite models. Similar in function to those federal models, IDOT's CNA tool is designed to assess deferred reinvestment needs and estimate the accrual of future needs by simulating the ongoing aging, rehabilitation, and replacement of Downstate Illinois assets based on detailed asset inventory data (documenting asset purchase dates, expected lives, replacement values, and other characteristics). There are two notable differences between the CNA model and FTA's TERM Lite:

1. Vehicles are replaced based on two thresholds: a minimum replacement life or a minimum lifetime mileage
2. Condition estimates include adjustments for operating on primarily unpaved roads and/or in hilly areas

Since initial development, the model has been updated multiple times to perform additional functions, accept additional data, and produce new outputs.

Figure 4.1. Main Menu of CNA Model



4.1.1 Capital Needs Assessment

4.1.1.1 Inventory Data

As described previously, all 56 Downstate grantees submit data annually via the CNA survey. The survey includes detailed data for vehicles, facilities, equipment, and ITS. For each of these categories, agencies provide the following:

- Detailed inventory of existing transit assets
- Agency plans for asset replacement (procurement) and for fleet and facility expansions

Agencies complete a new survey each year, and the model is updated annually with this new data. The survey forms include basic agency data as well, such as ridership by mode.

4.1.1.2 Model Function

As also noted, the CNA model is designed to assess deferred reinvestment needs (the SGR backlog) and then to simulate the asset aging process to assess reinvestment for the upcoming 10-year period. This needs assessment is based on the ages, counts, replacement costs, and other characteristics of assets as recorded in the asset inventory. With the exception of vehicles, the model calculates replacement needs based on age. In contrast, vehicle replacement is based on a mix of age and mileage. Agencies submit vehicle mileage data annually, and vehicle replacement is triggered when a vehicle reaches the end of its ULB (previously known as minimum replacement life) or when it meets the mileage threshold for its vehicle type.

In addition to reinvestment needs, the CNA model also reports a tally of fleet expansion needs based on the expansion plans submitted by each participant operator and/or estimated ridership growth based on county demographic growth and current fleet capacity.

4.1.1.3 Model Outputs

More than 20 reports are built into the current CNA model. These reports are updated annually for use by IDOT and the individual agencies. The reports include different groupings of asset needs as required to support IDOT's needs assessment by operator type (5307 and 5311) and asset type (fleet, facilities, and equipment/ITS). In addition, the model also generates reports on projected asset conditions, fleet vehicles that have exceed their ULB, facility condition ratings (observed), asset inventory holdings, and agency funding sources.

4.1.2 Model Updates to Meet MAP-21 TAM Requirements

4.1.2.1 Data

In 2017, the CNA surveys were updated to collect additional data required for MAP-21 TAM reporting and analysis. The surveys also were updated to cross reference existing data to the formats required for reporting to FTA and the NTD AIM required data fields.

4.1.2.2 Model Function

For the annual CNA, the model has historically been run "unconstrained." Unconstrained analysis provides all the financial resources required to fund all needs, both reinvestment and expansion, in the time required. However, unconstrained analysis is generally not realistic as budget constraints impact the ability to replace, rehabilitate, and expand assets. IDOT has used this unconstrained view of capital needs in the past to advocate for transit needs in the Downstate Illinois region and work on allocating the available funding during their annual budget cycle.

For this Group TAM Plan, the model's funding constraint function is used for analysis of investment priorities and to understand the impact of constraints on asset conditions. Annual funding levels are entered into the CNA model and restrict which assets are funded for replacement or rehabilitation in each year. The funding constraint only applies to reinvestment actions, not expansion.

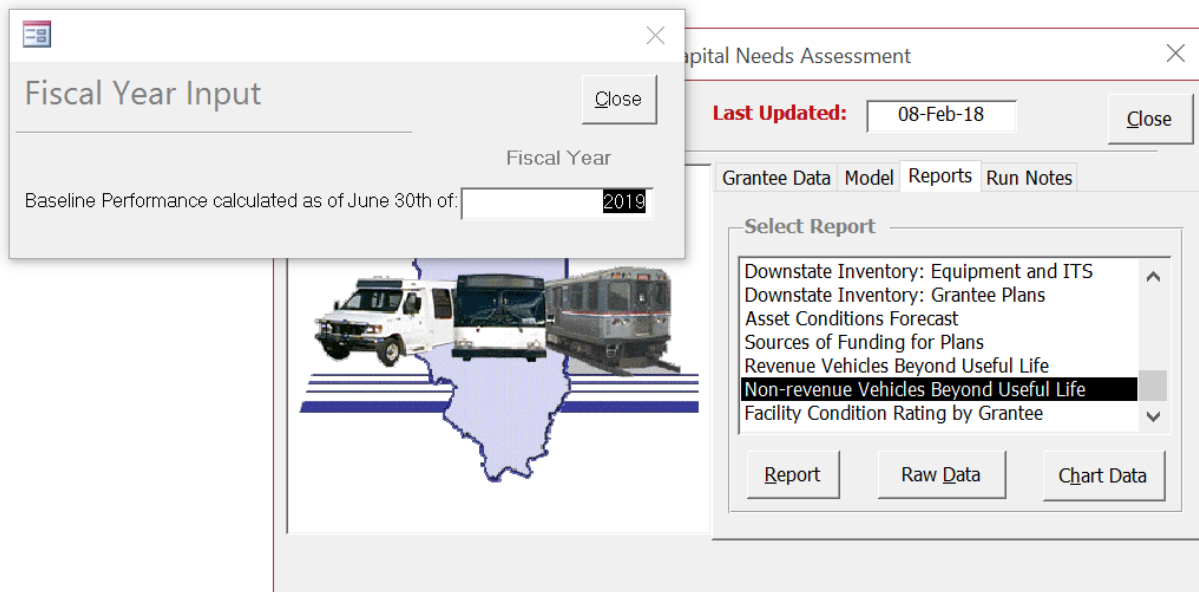
While the model has always supported constraining funding analysis, it was updated in 2018 to include the investment prioritization methodology as described in Section 5.

4.1.2.3 Model Outputs

New condition reports were developed for both vehicles and facilities. These reports are used in the performance target-setting process. The reports show the estimated condition of assets at the end of the upcoming fiscal year and allows the user to input the FY for analysis (shown below in Figure 4.2).

Participating agencies review the reports, submit any corrections, and provide information on planned capital investments that would change baseline performance. This information is used to calculate the annual SGR performance targets that IDOT reports to NTD.

Figure 4.2. Updated Report Menu of CNA Model with FY User Input



5.0 Investment Needs and Prioritization

Investment prioritization is a valuable input to investment decision making when needs exceed budget capacity. This section describes analysis of both the current investment backlog and financially unconstrained needs for the 54 Group Plan agencies (in total). This section also describes the investment prioritization process that has recently been developed for the Downstate CNA process. This includes descriptions of both the prioritization methodology and the results of a constrained and prioritized needs analysis subject to the expected overall capital budget capacity for the 54 Group Plan agencies for a 10-year period of analysis.

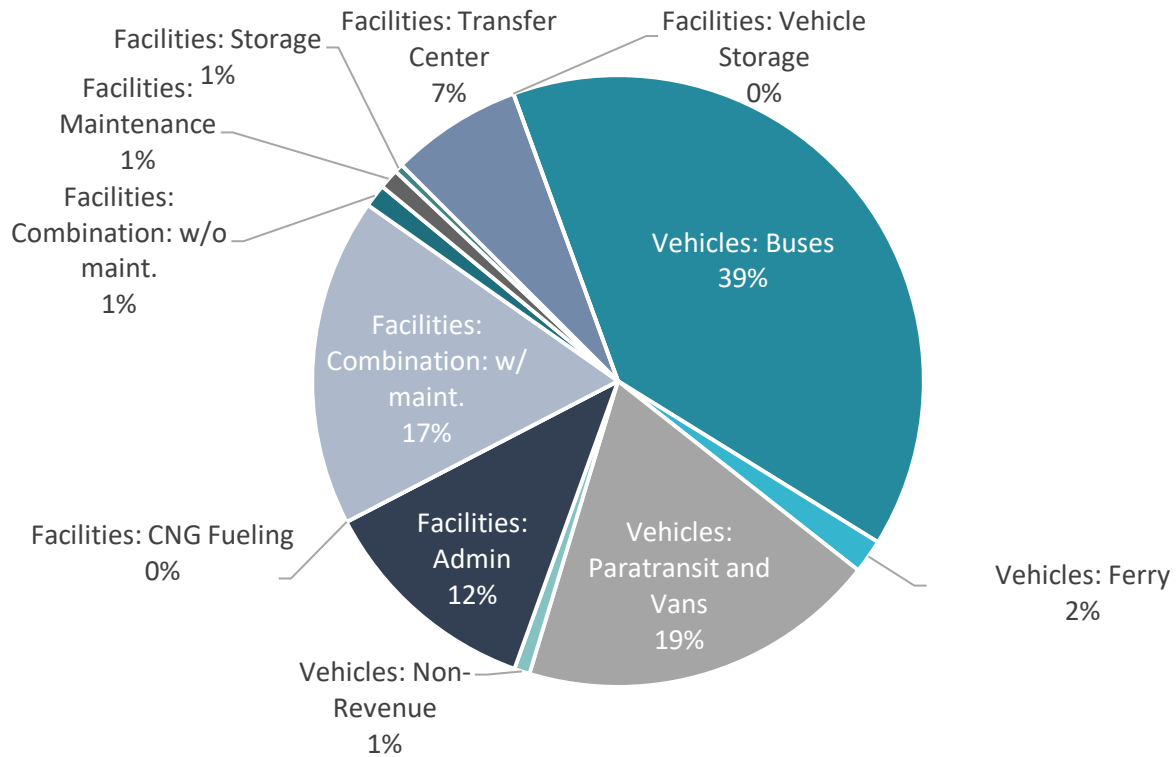
5.1 Backlog

This section provides an analysis of the SGR investment backlog for the 54 Group Plan agencies (in total). For this analysis, the SGR backlog is defined as the level of investment required to replace all assets that exceeded their ULB values as of the start of 2018 (the date of the most-recent inventory update). The results of this analysis are presented in table and chart format in Figure 5.1 and Figure 5.2, respectively. Based on this analysis, the Group Plan agencies had an estimated combined investment backlog of \$265 million in 2018. Roughly three-quarters of these deferred needs (77.1 percent) were concentrated within the 13 small urban agencies. When viewed by asset type, roughly 60 percent of deferred needs were concentrated in fleet reinvestment needs, with the remaining 40 percent primarily associated with facility needs (and related equipment).

Figure 5.1. SGR Backlog (Millions of \$2018)

Asset Type	Small Urban (5307)	Rural (5311)	Total
Vehicles			
Buses	\$85.9	\$18.5	\$104.5
Paratransit and Vans	\$18.3	\$32.3	\$50.6
Service and Other Non-Revenue Vehicles	\$1.7	\$0.5	\$2.2
Total: Vehicles	\$105.90	\$51.30	\$157.30
Facilities			
Admin	\$28.5	\$3.1	\$31.5
Combination w/ Maintenance	\$44.5	\$1.6	\$46.1
Combination w/o Maintenance	\$0.0	\$3.2	\$3.2
Maintenance	\$1.3	\$1.5	\$2.8
Storage	\$1.2	\$0.0	\$1.2
Transfer Center	\$18.4	\$0.0	\$18.4
Total: Facilities	\$93.9	\$9.4	\$103.3
Grand Total	\$199.80	\$60.70	\$260.60

Figure 5.2. SGR Backlog – Distribution by Asset Type



5.2 Unconstrained Needs

The unconstrained needs analysis is designed to determine the level of investment required to address the Group Plan agencies’ total needs for the upcoming 10-year period. The analysis includes investment requirements both for reinvestment in existing assets (SGR needs) as well as investment in expansion assets. In addition, the analysis assumes the agencies have unlimited access to reinvestment funding and have the planning and project management capacity to address each reinvestment need within a one-year period. While unattainable in the real world, this analysis is helpful in identifying all existing and upcoming capital needs as well as a method to assess the gap between total needs and expected funding capacity.

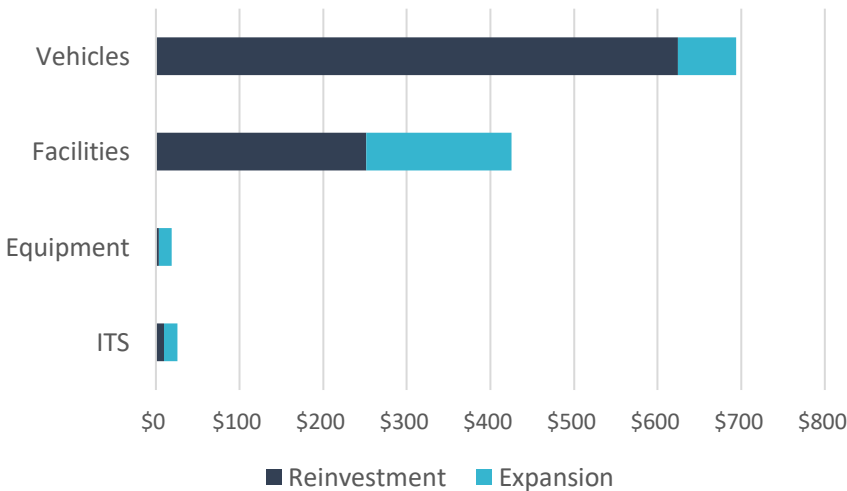
To assess the Group Plan agencies’ combined unconstrained needs, the CNA model was run for a 10-year time span, assuming no funding constraint and 3 percent inflation; therefore, all needs are in year of expenditure (YOE) dollars. In this scenario, the current SGR backlog can be eliminated in the first year of analysis. The resulting unconstrained 10-year needs are shown in Figure 5.3 in millions of YOE dollars.

Figure 5.3. Unconstrained Needs – Existing and Expansion Assets (Millions \$YOE)

Existing	Backlog	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Vehicles	\$157.2	\$20.0	\$13.4	\$17.6	\$18.8	\$62.6	\$78.7	\$68.1	\$46.9	\$50.7	\$90.2	\$624.0
Facilities	\$103.3	\$29.6	\$12.2	\$42.1	\$6.9	\$8.2	\$5.6	\$15.0	\$11.5	\$7.6	\$9.7	\$251.7
Equipment	\$0.0	\$0.9	\$0.4	\$0.2	\$0.5	\$0.5	\$0.5	\$0.3	\$0.0	\$0.0	\$0.0	\$3.3
ITS	\$0.0	\$6.0	\$2.3	\$0.6	\$0.0	\$0.0	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0	\$9.3
Total	\$260.5	\$56.5	\$28.3	\$60.5	\$26.2	\$71.3	\$84.8	\$83.7	\$58.4	\$58.4	\$99.9	\$888.4
Expansion	Backlog	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Vehicles	N/A	\$14.3	\$4.8	\$6.4	\$4.5	\$5.4	\$5.3	\$5.9	\$10.5	\$6.3	\$6.5	\$70.0
Facilities	N/A	\$74.0	\$54.8	\$10.9	\$2.0	\$30.0	\$0.0	\$0.0	\$1.9	\$0.0	\$0.0	\$173.6
Equipment	N/A	\$7.9	\$1.9	\$2.8	\$1.0	\$0.3	\$0.3	\$0.5	\$0.3	\$0.3	\$0.0	\$15.3
ITS	N/A	\$9.6	\$3.1	\$2.8	\$0.1	\$0.3	\$0.0	\$0.2	\$0.1	\$0.1	\$0.0	\$16.3
Total	N/A	\$105.9	\$64.7	\$22.9	\$7.7	\$35.9	\$5.6	\$6.6	\$12.9	\$6.7	\$6.5	\$275.3
Total	\$260.5	\$162.4	\$93.0	\$83.4	\$33.9	\$107.1	\$90.4	\$90.3	\$71.3	\$65.0	\$106.4	\$1,163.6

Based on this analysis, the Group Plan agencies have more than \$1.1 billion in reinvestment and expansion needs during the upcoming 10-year period, with the majority of these needs (77 percent) required for the rehabilitation or replacement of existing assets. When viewed on an asset type basis, as shown in Figure 5.4, fleet investment needs account for roughly 60 percent of combined SGR and expansion needs, and just over 70 percent of just SGR needs. Facilities investments account for 36 percent of combined 10-year capital needs and about 30 percent of SGR only needs.

Figure 5.4. Unconstrained Needs – Distribution by Asset Type (Millions \$YOE)



5.3 Capital Funding

Investment prioritization is only required when capital funding is constrained (insufficient to address investment needs). Hence, the first step in developing an improved prioritization process for the Downstate Illinois region was to more effectively assess the total capital funding capacity for the Group Plan agencies. Given IDOT’s role as the designated recipient of federal capital funding, and comparable

understanding of the availability of state capital funding for transit, IDOT has long possessed a solid understanding of the total federal and state capital transit funding for the Group Plan agencies. However, prior to development of this plan, IDOT did not have a sense of the region’s capital funding capacity from local sources.

To address this issue, IDOT, RTAC, and the Group Plan agencies expanded the CNA annual reporting process to include the collection of data on each grantee’s local capital funding capacity. Specifically, IDOT has requested that each grantee complete a worksheet that identifies the sources and expected flow of funds from local capital funding sources. Figure 5.5 provides an example of historic and projected local funding for one participating agency. The pattern of local funding for each agency is expected to be different, as each agency has unique funding and grant opportunities. Going forward, this reporting process will be included as part of the annual CNA reporting process.

Figure 5.5. Local Capital Funding Sources CNA Input Table

Grantee Local Funding:
 Each Group TAM Plan participant is requested to provide local funding (three years of historic funding data) and ten years of projected funding (to the best of your knowledge). Local funding will be added to state funding to calculate total annual funding constraints for modeling purposes.

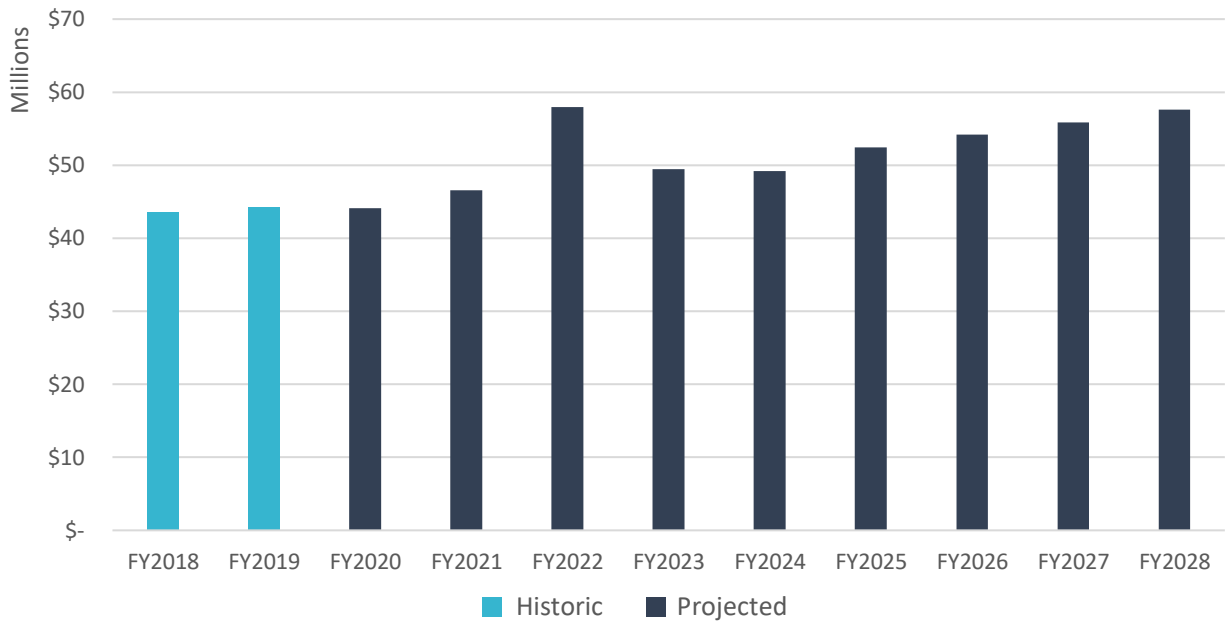
Funding Source(s)	Historic Funding			Projected Funding					
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Example Funding Source	\$50,000	\$51,000	\$ 52,000	\$ 52,000	\$ 52,000	\$ 55,000	\$ 56,000	\$ 57,000	\$ 58,710
Local Capital	\$ 1,993,844	\$ 491,438	\$ 615,000	\$ 120,000	\$ 180,000	\$ 3,204,000	\$ 300,000	\$ 300,000	\$ 300,000
[Funding Source #2]	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X
[Funding Source #3]	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X
[Funding Source #4]	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X
[Funding Source #5]	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X
[Funding Source #6]	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X
[Funding Source #7]	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X
[Funding Source #8]	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X
[Funding Source #9]	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X
[Funding Source #10]	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X	\$X
Total Funding	\$ 1,993,844	\$ 491,438	\$ 615,000	\$ 120,000	\$ 180,000	\$ 3,204,000	\$ 300,000	\$ 300,000	\$ 300,000

5.3.1 Annual Funding Constraints

The results of this capital funding sources collection process are presented in Figure 5.6. Specifically, this chart presents the expected flow of combined capital funding from all sources (federal, state, and local). The resulting annual totals have been used to establish the total level of capital funding available for the rehabilitation and replacement of Group Plan existing assets for the upcoming 10-year period of analysis. The resulting values have been used in the CNA model, along with the prioritization process described in the following section, to develop constrained projections of the reinvestment needs of the Group Plan agencies.

It is important to note that IDOT’s understanding of state funding for transit is based on recent history and the priorities of the current Illinois state administration. Therefore, the funding projections shown below are subject to change as changes occur in state-level funding priorities and budgets. For example, if significant changes occur with a new administration this may trigger an update to the Group TAM Plan before the minimum four-year requirement.

Figure 5.6. Combined Capital Funding Capacity of Group Plan Agencies



5.4 Investment Prioritization Methodology

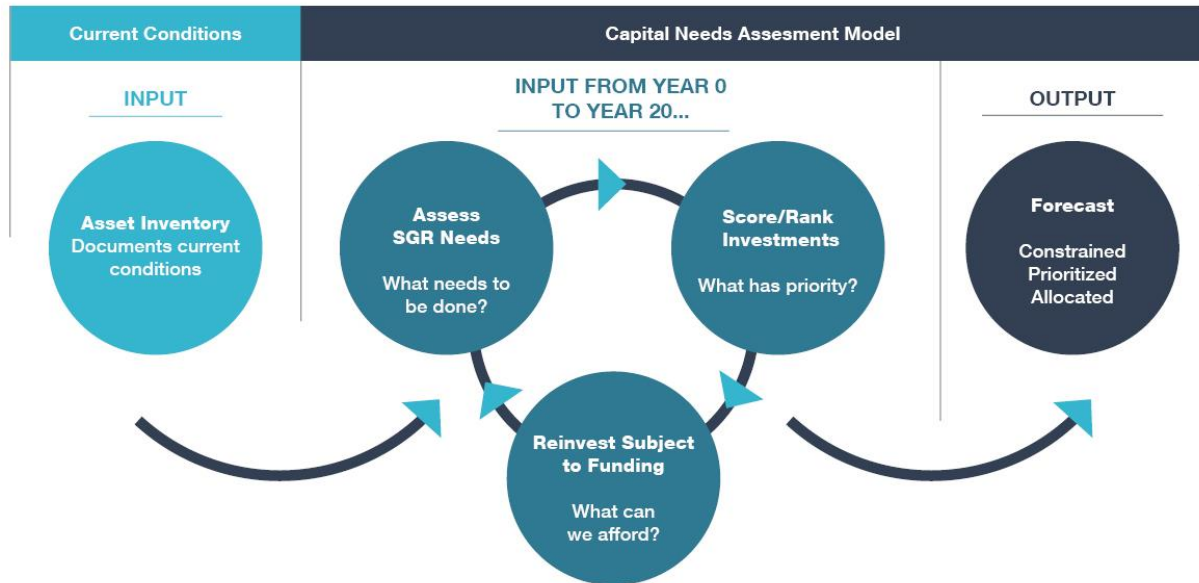
For many years, IDOT has utilized the statewide Capital Needs Assessment to determine how Illinois state and federal capital funds should be distributed to eligible grantees. For the purposes of this Group TAM Plan, prioritization is considered across all funding sources. Therefore, a prioritization routine was built into the CNA model to address all needs across all available funding. The resulting prioritization scores can be used to inform IDOT’s annual budget cycle, but will not replace or supersede the existing grants process.

The CNA investment prioritization process was developed based on the approach used in FTA’s TERM Lite model (Figure 5.7). Specifically, the process was designed to continually repeat the following three steps for each of the 10 years of a model run:

1. Determine which assets have reinvestment needs and assess the cost to address those needs
2. Assign prioritization scores to each investment need and then sort and rank these needs from highest to lowest priority
3. Address the identified reinvestment needs one at a time—starting from the highest-priority need on down—until the budget capacity for that year is completely exhausted (then move to the next year of analysis)

The annual budget capacity for this analysis was presented in Figure 5.6.

Figure 5.7. Prioritization Methodology



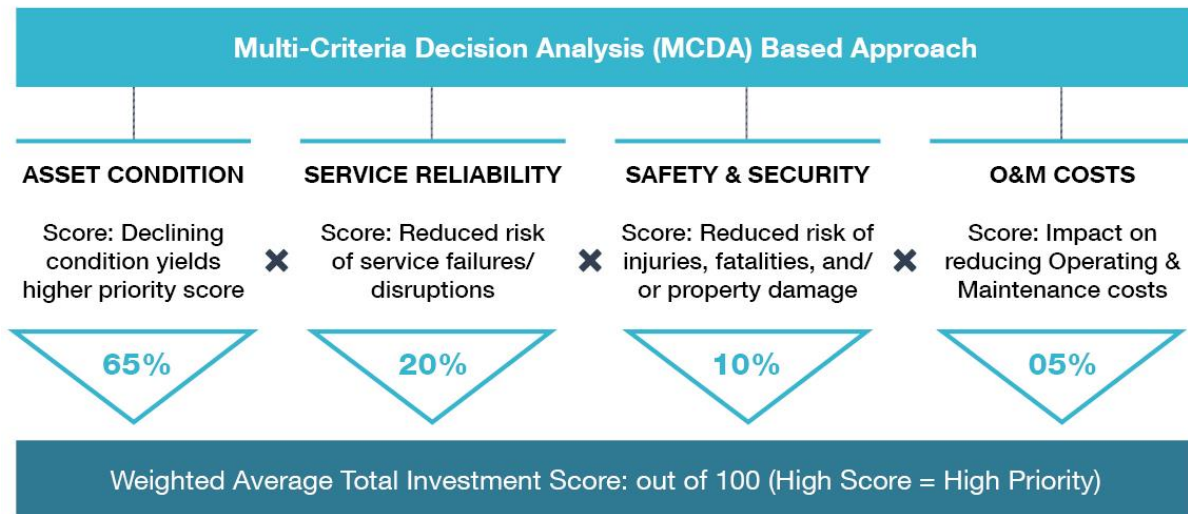
5.5 Investment Prioritization Criteria and Scoring

The prioritization scores for reinvestment needs are assigned using a process known as Multi-Criteria Decision Analysis (MCDA). The MCDA process, as developed within IDOT’s CNA tool, is presented in Figure 5.8.

For CNA prioritization, the prioritization relies on four criteria, with each criterion scored on a scale of 5 (highest priority) to 1 (lowest priority). The four criteria are as follows:

- **Asset Condition:** For prioritization purposes, the CNA tool assesses asset condition using decay curves built into the CNA tool. These decay curves assess asset condition based on the ULB values entered for each asset record. For prioritization purposes, assets in poor condition receive high prioritization scores (e.g., 5) while assets in good or excellent condition receive low prioritization score (e.g., 1). Note: The condition *prioritization scores* are reversed from the usual condition *rating scale*.
- **Reliability:** Assets are scored based on the likelihood that reinvestment will reduce the risk of service interruptions or failures. This scoring is based on asset type (e.g., with reinvestment in vehicles having a high likelihood of improving reliability).
- **Safety/Security:** Assets are scored based on the likelihood that reinvestment will reduce the risk of injuries, fatalities, property damage, assaults, or theft. This scoring is based on asset type (e.g., with reinvestment in alarm systems having a high likelihood of improving safety or security).
- **Operating and Maintenance (O&M) Costs:** Assets are scored based on the likelihood that reinvestment will reduce O&M costs. This scoring is based on asset type (e.g., with reinvestment in vehicles having a high likelihood of reducing costs).

Figure 5.8. Prioritization Criteria and Scoring



5.6 Constrained Run and Prioritization Results

This section presents the results of the prioritized, constrained reinvestment needs analysis (based on the funding capacity presented in Figure 3.6). It is important to emphasize that this analysis is solely focused on reinvestment (SGR) needs for existing transit assets; it does not consider any expansion needs.

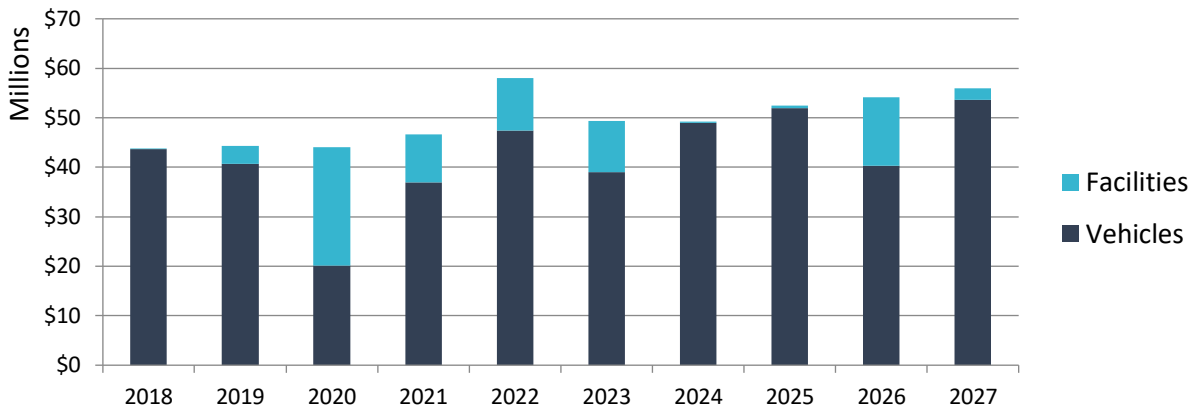
The results of the prioritized constrained needs analysis are presented below in Figure 5.9 and Figure 5.10. Specifically, Figure 5.9 presents the detailed needs in tabular form (by operator and asset type), whereas Figure 5.10 presents these results in graphical format (by asset category). These constrained, prioritized results are presented in much greater detail in Appendix 2.

Figure 5.9. Prioritized 10-Year Constrained Needs Projection (By Asset Type)

Operator Type / Asset Type	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Urban Agencies (5307)	\$22.5	\$29.0	\$36.8	\$37.8	\$45.1	\$42.2	\$36.1	\$39.0	\$36.4	\$26.6	\$351.7
Vehicles	\$22.5	\$25.9	\$13.3	\$28.2	\$35.1	\$31.9	\$35.9	\$38.8	\$22.5	\$25.0	\$279.3
Buses	\$16.4	\$20.4	\$10.9	\$21.6	\$32.8	\$27.6	\$31.1	\$34.4	\$12.8	\$15.8	\$223.9
Ferry	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Paratransit and Vans	\$6.0	\$5.5	\$2.4	\$6.6	\$2.2	\$4.2	\$4.7	\$4.4	\$9.7	\$8.9	\$54.7
Non-Revenue Vehicles	\$0.1	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0	\$0.1	\$0.0	\$0.0	\$0.4	\$0.7
Facilities	\$0.0	\$3.1	\$23.5	\$9.6	\$10.0	\$10.3	\$0.2	\$0.2	\$13.9	\$1.6	\$72.4
Admin	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Admin/Maintenance	\$0.0	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2
CNG Fueling	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Combination w/ maint.	\$0.0	\$2.1	\$23.1	\$3.2	\$5.3	\$4.5	\$0.1	\$0.1	\$10.4	\$0.5	\$49.2
Maintenance	\$0.0	\$0.9	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$1.3	\$0.1	\$2.7
Multimodal	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1
Storage	\$0.0	\$0.0	\$0.0	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.8	\$1.5
Transfer Center	\$0.0	\$0.0	\$0.3	\$5.6	\$4.6	\$5.7	\$0.0	\$0.0	\$2.2	\$0.1	\$18.7
Vehicle Storage	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Rural Agencies (5311)	\$21.1	\$15.3	\$7.3	\$8.7	\$12.8	\$7.2	\$13.1	\$13.5	\$17.7	\$29.3	\$146.0
Vehicles	\$21.1	\$14.7	\$6.7	\$8.7	\$12.2	\$7.2	\$13.1	\$13.1	\$17.7	\$28.6	\$143.3
Buses	\$3.5	\$1.5	\$0.0	\$1.8	\$0.0	\$0.0	\$0.1	\$1.9	\$3.3	\$6.8	\$18.9
Paratransit and Vans	\$17.6	\$13.1	\$6.7	\$7.0	\$12.0	\$7.0	\$12.9	\$11.2	\$14.3	\$21.7	\$123.5
Non-Revenue Vehicles	\$0.0	\$0.1	\$0.0	\$0.0	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.8
Facilities	\$0.0	\$0.5	\$0.5	\$0.0	\$0.6	\$0.0	\$0.0	\$0.3	\$0.0	\$0.7	\$2.7
Admin	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Combination w/ maint.	\$0.0	\$0.2	\$0.0	\$0.0	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.9
Combination w/o maint.	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Maintenance	\$0.0	\$0.3	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	\$0.0	\$0.7	\$1.9
Vehicle Storage	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Grand Total	\$43.6	\$44.3	\$44.1	\$46.6	\$58.0	\$49.4	\$49.2	\$52.4	\$54.2	\$55.9	\$497.7

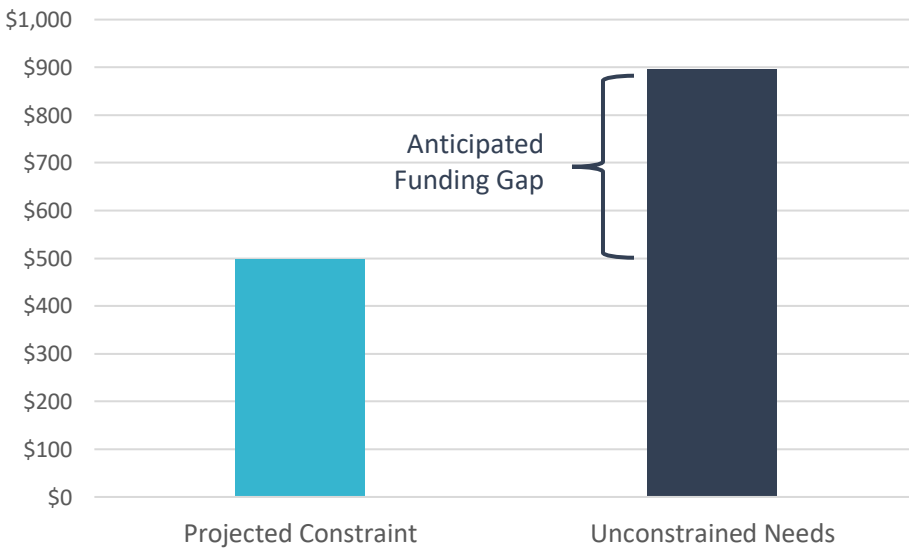
Note that while vehicles make up roughly 70 percent of *unconstrained* reinvestment needs (see Figure 5.3), the prioritization process allocates 85 percent of *constrained* funding to this asset category, with the remaining 15 percent allocated to facilities reinvestment needs. This difference reflects the higher prioritization scoring awarded to vehicles given the criticality of fleet SGR to transit service—including service reliability, safety, and rider comfort.

Figure 5.10. Prioritized 10-Year Constrained Needs Projection (By Asset Category)



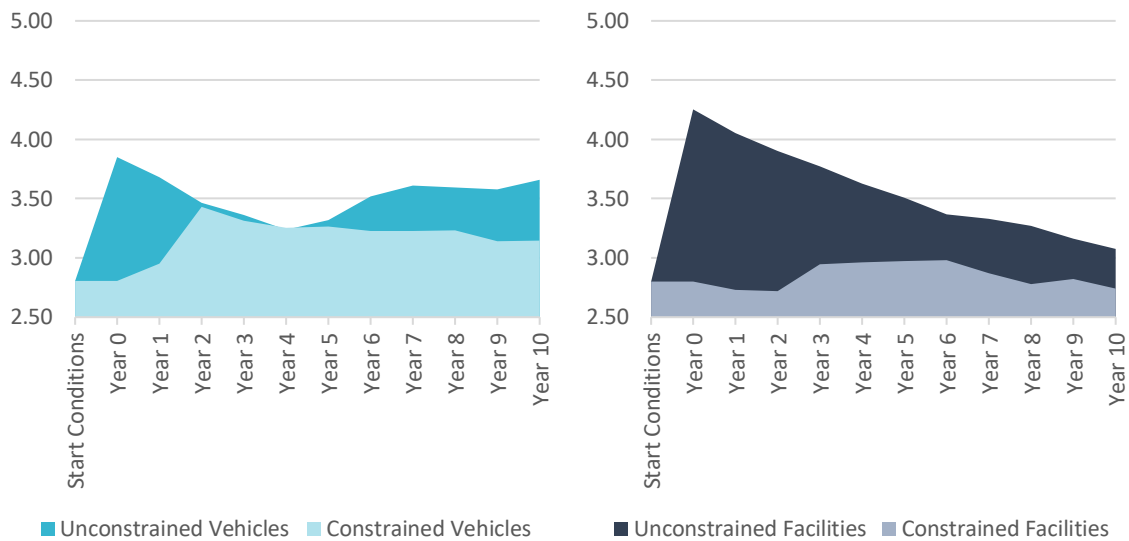
The share of funding allocated to urban versus rural agencies under this *constrained* funding scenario (71 percent and 29 percent, respectively), is virtually the same as each operator type’s share of *unconstrained* needs (72 percent and 28 percent, respectively). Therefore, the prioritization in the CNA model maintains the allocation of funds geographically, while prioritizing fleet over facilities. Equipment and ITS assets do not receive funding under the *constrained* scenario due to the severe funding gap.

Figure 5.11. Projected Funding Gap for Reinvestment Needs (\$M YOY)



Due to the prioritization of vehicles explained above, the impact of this funding gap is seen most in the transit facilities serving the Downstate Illinois region. Figure 5.12 illustrates the impact of replacing and rehabilitating vehicles and facilities on time (in an unconstrained scenario) versus the delayed replacements and rehabilitations under the expected capital budget constraint. In particular, facility conditions decay more severely than vehicles, though both key asset types have a lower average condition over time under constrained funding.

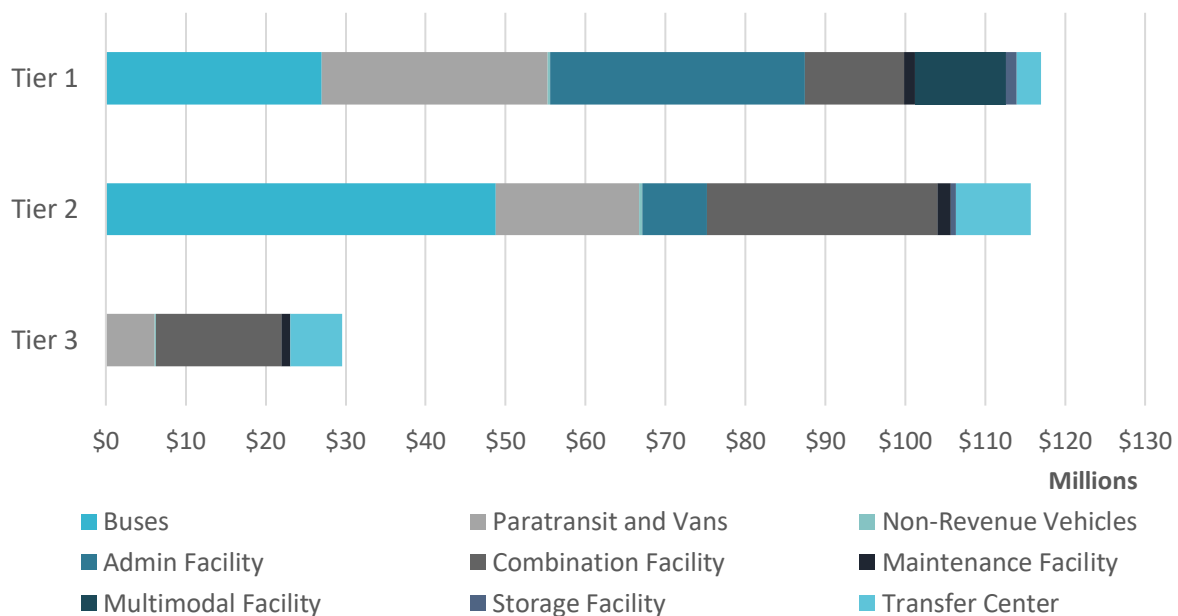
Figure 5.12. Comparison of Conditions Estimates for Constrained and Unconstrained Scenarios



5.7 Priority Investment Tiers

Finally, Figure 5.13 provides an overview of the criticality of reinvestment needs for Group Plan assets. Specifically, this chart segments the estimated \$261 million in backlog needs into three investment priority tiers. In this breakout, Tier 1 represents the highest criticality needs (above a 70-point priority score)—reinvestment actions that are top priority and offer the greatest reinvestment returns in terms of service reliability, safety and quality improvement. In contrast, Tier 3 consists of the lowest priority backlog needs (below a 50-point priority score)—those that agencies would like to address but which currently pose minimal risk to service reliability, safety and quality. Tier 2 needs are of “moderate” criticality (between 50 and 70 points out of 100). Based on this analysis, about 45 percent of current backlog needs are considered critical to address (Tier 1), while a majority of backlog needs are considered non-critical (Tier 2 or Tier 3).

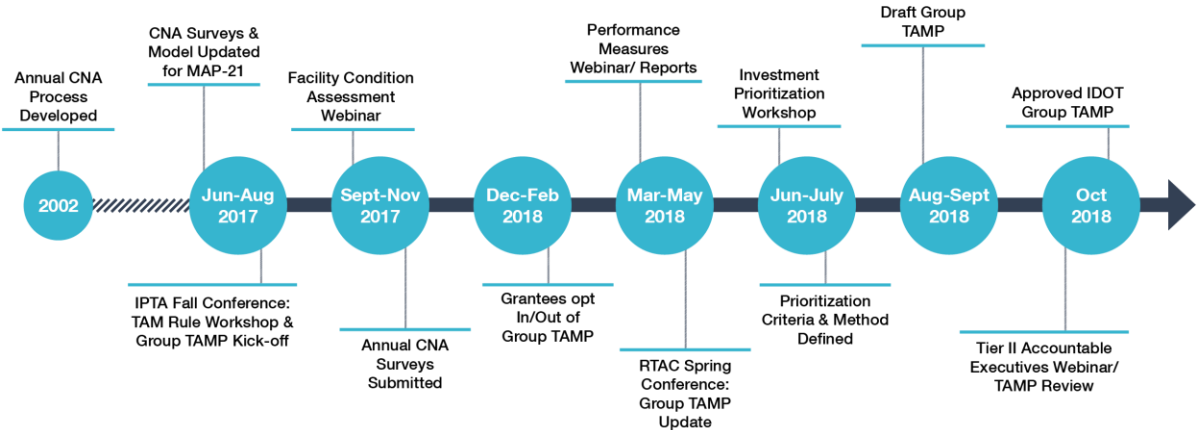
Figure 5.13. Investment Priority Tiers (\$2018)



6.0 Maintaining the Plan

The historic process for developing the Group TAM Plan is outlined in Figure 6.1. As noted earlier, the Downstate Illinois region has been utilizing asset management practices for estimating capital needs annually since 2002. The release of the final TAM rule in 2016 provided the guidance needed to modify this ongoing process to meet MAP-21 requirements.

Figure 6.1. 2017–2018 Group TAM Plan Development Process

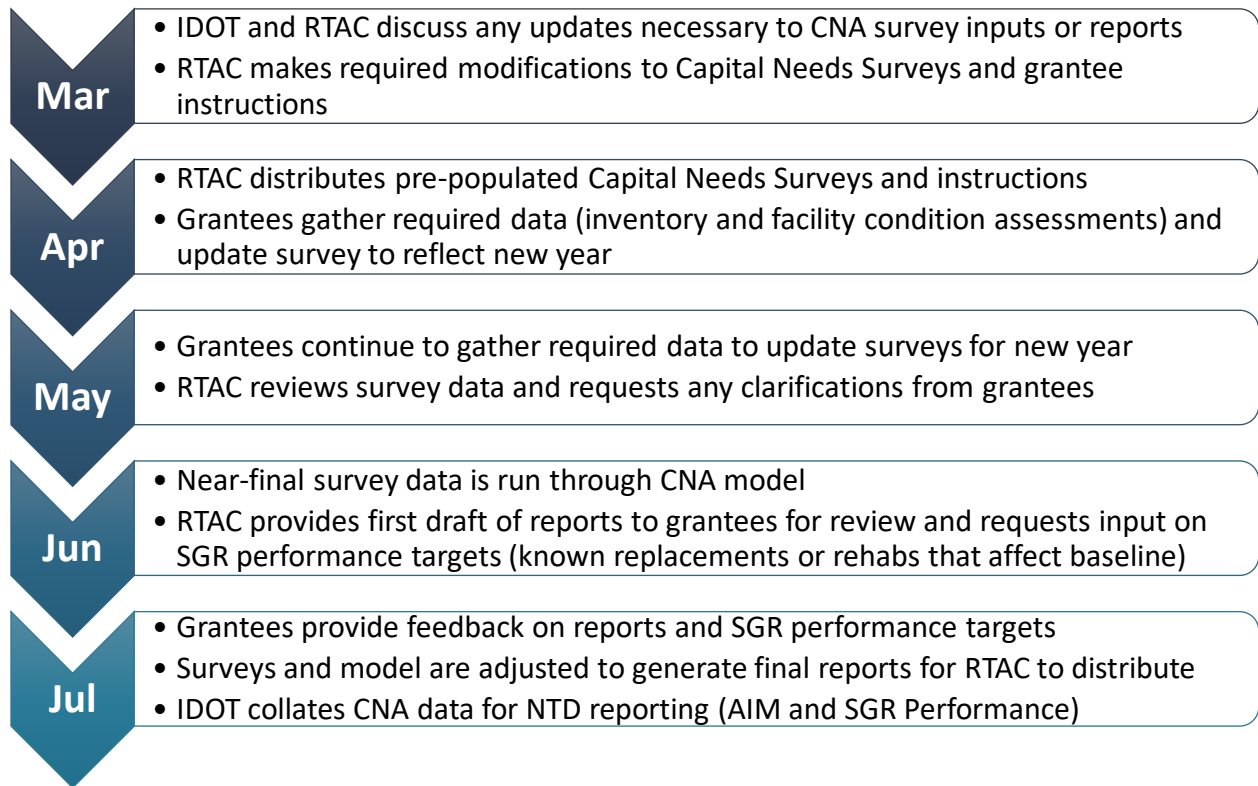


In the past, the annual CNA process began in August each year with updates to the survey form. Grantees received a pre-populated survey form with the previous year’s inventory data in September and would complete updates for the current year by the end of November. RTAC reviewed the data for completeness and errors in December and January, and loaded the data into the CNA model. Draft CNA reports were made available for grantee review in January. Feedback would be incorporated and reports finalized for IDOT in February, to support their annual capital budget cycle.

6.1 Annual Activities

Going forward, IDOT, RTAC, and the Group TAM Plan participants will continue to work together to conduct the annual CNA process and to prepare future updates to this Group TAM Plan. However, to meet the federal requirements for NTD reporting of SGR performance targets, the annual cycle will now begin in April to support reporting on the state fiscal year (July to June). RTAC will still be responsible for updating and distributing the CNA survey annually to kick off grantee involvement. The new schedule for the annual process is shown below in Figure 6.2.

Figure 6.2. Annual TAM Activity Schedule (Starting 2019)



6.2 Ongoing Improvements

At a minimum, IDOT will coordinate with its partners to update this Group TAM Plan based on the most-recent CNA data. Each year the CNA data will improve, as more grantees complete the physical condition assessment of facilities and submit forms to RTAC. Additional webinars, workshops and training will be provided to support grantees in improving their asset inventories and performance measures.

Major changes in the funding of transit, federal requirements, or inventory or performance definitions also may trigger a review of this Group TAM Plan before the four-year timeframe.

7.0 Appendices

7.1 Appendix 1 – Glossary

Asset Management — A strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on both engineering and economic analysis based on information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair during the lifecycle of the assets at minimum practical cost.

Capital Asset — Includes equipment, rolling stock, infrastructure, and facilities for use in public transportation and owned or leased by a recipient or sub-recipient of federal financial assistance.

Capital Need — Represents a capital request to rehabilitate, replace, or add a group of assets to the system. Each capital need consists of a group of similar or interdependent assets.

Decay Curves — Graphic representation of the relationship between an asset’s condition and its age and type. TERM Lite’s asset decay curves predict/forecast condition based on age and type.

Deferred Needs — Scheduled capital investment postponed or put off until a later time; equivalent to FTA’s definition of backlog.

Facilities — Buildings (excluding stations), major shops, storage yards, central control, and equipment necessary for operating the system.

Moving Ahead for Progress in the 21st Century (MAP-21) — Transportation and reauthorization bill signed into law on July 6, 2012. It is a policy and programmatic framework designed to create a performance-based surface transportation program for highway, transit, bike, and pedestrian programs.

Rehabilitation — Act of restoring an asset to its original state or a condition close to its original state.

State of Good Repair (FTA/MAP-21 Final Rule, July 2016) — The condition in which an asset is able to operate at a full level of performance. Three objective standards define “full level of performance:”

- The asset is able to perform its manufactured design function
- The use of the asset in its current condition does not pose a known unacceptable safety risk
- The asset’s lifecycle investment needs have been met or recovered, including all scheduled, rehabilitation and replacements

Stations — Includes bus shelters, passenger parking facilities, and assets related to rail stations. Rail station assets include station buildings, elevators, escalators, station-specific electrification assets, and other related components. Passenger parking facilities include both surface lots and garages.

Systems — Includes hardware and software assets necessary to operating the system. Types include: communications systems, electrification, revenue collection, and utilities.

Tier I Agency – Operates rail modes and/or 101 or more revenue vehicles during peak operation.

Tier II Agency – Any combination of the following: American Indian Tribe, only funded as a sub-recipient to a state DOT, does not operate rail modes, and/or operates 100 or fewer revenue vehicles in peak operation.

TERM Lite (Transit Economic Requirements Model) — Local/state version of analysis tool designed to help transit agencies assess their SGR deferred capital needs (total dollar value and by asset type), level of annual investment to attain SGR or other investment objective, impact of variations in funding on future asset conditions and reinvestment needs, and investment priorities (by mode and asset type).

Useful Life Benchmark — Estimated lifespan of a capital asset, during which it can be expected to contribute to operations.

Vehicles — Includes both revenue vehicles (rail cars, buses, and vans) and non-revenue vehicles.

7.2 Appendix 2 – Participating Agencies

Below is a complete list of the 54 Downstate Illinois Tier II agencies that opted to participate in the IDOT Group TAM Plan.

Figure 6.1. Group Plan Participants

Agency	City	Primary Funding Source	Annual Ridership (2017)			
			Bus	Paratransit	Vanpool	Water Taxi
Bloomington-Normal Public Transit System	Bloomington	5307	2,217,641	83,366		
Bond County	Greenville	5311		42,139		
Boone County	Belvidere	5311		29,367		
Bureau County	Princeton	5311		67,558		
Carroll County	Mt Carroll	5311		10,500		
Champaign County	Urbana	5311	21,041			
City of DeKalb	DeKalb	5307		157,000		
Coles County	Charleston	5311		69,495		
CRIS Rural Mass Transit District	Danville	5311	51,810	9,895		
Champaign-Urbana Mass Transit District	Urbana	5307	11,982,584	99,519		
City of Danville	Danville	5307	635,084	10,013		
City of Decatur	Decatur	5307	1,208,742	30,352		
DeKalb County	Sycamore	5311		27,359		
Douglas County	Charleston	5311		8,545		
Effingham County	Effingham	5311		37,207		
City of Freeport	Freeport	5311		81,413		
Fulton County	Lewistown	5311		26,446		
City of Galesburg	Galesburg	5311	148,606	19,029		
Grundy County	Morris	5311		15,716		
Hancock County	Macomb	5311		12,059		
Henry County	Cambridge	5311		46,047		
Jackson County Mass Transit District	Carbondale	5311		78,960		
Jersey County	Jerseyville	5311		29,802		
Jo Daviess County	Galena	5311		43,725		
Kankakee County	Kankakee	5311		30,209		
Kendall County	Yorkville	5307	8,624	26,299		
Lee County	Dixon	5311		81,360		
Logan Counties	Lincoln	5311		21,180		
City of Macomb	Macomb	5311	1,350,789	38,105		
Macoupin County	Carlinville	5311		70,000		
Madison County Mass Transit District	Granite City	5307	2,244,109	60,025	108,507	
Marshall County	Henry	5311		6,130		
McLean County	Bloomington	5311		129,946		
Monroe-Randolph Transit District	Sparta	5311		10,662		
City of Ottawa	Ottawa	5311		60,369		
Peoria County	Peoria	5311		24,023		
Greater Peoria Mass Transit District	Peoria	5307	2,711,720	138,603		
Piatt County	Monticello	5311		37,747		
City of Quincy	Quincy	5311	342,219	90,461		
Rock Island County Metro Mass Transit District	Moline	5307	3,194,160	20,202		43,584
Rock Island County	Rock Island	5311		9,990		

Agency	City	Primary Funding Source	Annual Ridership (2017)			
			Bus	Paratransit	Vanpool	Water Taxi
Rockford Mass Transit District	Rockford	5307	1,574,445	102,549		
River Valley Metro Mass Transit District	Bourbonnais	5307	801,986	17,780		
Sangamon County	Springfield	5311		3,033		
Shawnee Mass Transit District	Vienna	5311		189,833		
Shelby County	Shelbyville	5311		91,435		
Springfield Mass Transit District	Springfield	5307	1,178,748	77,901		
South Central IL Mass Transit District	Centralia	5311		540,597		
Stateline Mass Transit District	Rockton	5307		17,972		
Tazewell County	Pekin	5311		34,573		
Warren County	Monmouth	5311		54,357		
West Central Mass Transit District	Jacksonville	5311		104,224		
Whiteside County	Morrison	5311		49,584		
Woodford County	Eureka	5311		14,829		

7.3 Appendix 3 – Detailed Prioritized Constrained Needs

The following are the constrained, prioritized needs for the group plan agencies based on expected funding levels for the upcoming 10-year period. Values are expressed in thousands of \$YOE.

Figure 6.2. Constrained and Prioritized 10-Year Needs (Thousands of \$YOE)

Operator Type and Asset Type	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Urban Agencies (5307)	\$22,538	\$29,042	\$36,796	\$37,849	\$45,141	\$42,230	\$36,081	\$38,989	\$36,416	\$26,615	\$351,696
1. Vehicles	\$22,530	\$25,910	\$13,320	\$28,220	\$35,146	\$31,896	\$35,888	\$38,814	\$22,536	\$25,041	\$279,303
Buses	\$16,425	\$20,354	\$10,916	\$21,604	\$32,829	\$27,650	\$31,142	\$34,371	\$12,795	\$15,833	\$223,919
Articulated Bus	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Large Bus (>35 pass)	\$3,594	\$11,161	\$8,801	\$6,832	\$14,142	\$17,686	\$20,830	\$7,186	\$676	\$0	\$90,908
Large Bus HYBRID (>35 pass)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,417	\$12,118	\$10,452	\$45,988
Medium Bus (25-35 pass)	\$12,831	\$9,194	\$2,115	\$14,773	\$18,687	\$9,964	\$10,313	\$3,767	\$0	\$5,381	\$87,023
Ferry	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
River Taxi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Paratransit and Vans	\$6,046	\$5,466	\$2,404	\$6,568	\$2,218	\$4,246	\$4,673	\$4,444	\$9,742	\$8,853	\$54,660
Car	\$50	\$52	\$0	\$1,054	\$57	\$178	\$61	\$64	\$1,383	\$204	\$3,104
Heavy Duty	\$2,470	\$942	\$418	\$432	\$298	\$1,544	\$479	\$1,985	\$1,369	\$0	\$9,938
Light-Duty (12-pass)	\$1,825	\$2,439	\$326	\$2,782	\$262	\$181	\$2,430	\$967	\$1,702	\$2,694	\$15,606
Medium Duty HYBRID (14-pass)	\$0	\$0	\$0	\$0	\$184	\$0	\$0	\$0	\$0	\$0	\$184
Medium-Duty (14-pass)	\$504	\$1,826	\$720	\$1,397	\$482	\$1,198	\$413	\$855	\$2,987	\$3,550	\$13,934
Medium-Duty Fixed Route	\$715	\$0	\$0	\$0	\$0	\$849	\$0	\$0	\$0	\$0	\$1,564
Mini-Van	\$350	\$207	\$375	\$610	\$631	\$297	\$615	\$191	\$724	\$1,022	\$5,023
Super Medium-Duty (22-pass)	\$132	\$0	\$566	\$293	\$303	\$0	\$325	\$0	\$522	\$360	\$2,500
Super Medium-Duty Fixed Route	\$0	\$0	\$0	\$0	\$0	\$0	\$166	\$0	\$0	\$0	\$166
Vanpool	\$0	\$0	\$0	\$0	\$0	\$0	\$184	\$382	\$1,054	\$1,022	\$2,643
Non-Revenue Vehicles	\$59	\$90	\$0	\$48	\$100	\$0	\$73	\$0	\$0	\$355	\$724
Other	\$59	\$0	\$0	\$0	\$0	\$0	\$73	\$0	\$0	\$0	\$132

Service Vehicle	\$0	\$90	\$0	\$48	\$100	\$0	\$0	\$0	\$0	\$355	\$593
2. Facilities	\$8	\$3,132	\$23,476	\$9,629	\$9,994	\$10,333	\$193	\$175	\$13,880	\$1,574	\$72,393
Admin	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$2
Building Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cooling System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Heating System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lot Surface	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$2
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Roof	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ventilation System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Admin/Maintenance	\$6	\$162	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$168
Other	\$6	\$162	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$168
CNG Fueling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$2
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$2
Combination (e.g., admin, storage) w/ maint.	\$1	\$2,061	\$23,137	\$3,197	\$5,303	\$4,514	\$88	\$80	\$10,351	\$494	\$49,225
Building Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cooling System	\$0	\$0	\$0	\$1	\$1	\$6	\$6	\$1	\$1,161	\$0	\$1,176
Electrical System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$2,049	\$107	\$111	\$169	\$73	\$76	\$78	\$81	\$417	\$3,161
Heating System	\$0	\$0	\$0	\$0	\$0	\$15	\$7	\$0	\$9,109	\$0	\$9,131
Lot Surface	\$1	\$4	\$6,502	\$2	\$963	\$4,092	\$0	\$0	\$0	\$5	\$11,569
Other	\$0	\$9	\$13,736	\$3,082	\$13	\$329	\$0	\$0	\$0	\$72	\$17,241
Plumbing System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Roof	\$0	\$0	\$0	\$0	\$4,156	\$0	\$0	\$0	\$0	\$0	\$4,156
Ventilation System	\$0	\$0	\$2,791	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,791
Maintenance	\$0	\$902	\$0	\$61	\$83	\$97	\$100	\$92	\$1,288	\$91	\$2,714
Building Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Equipment	\$0	\$0	\$0	\$57	\$79	\$82	\$85	\$88	\$68	\$70	\$529
Heating System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lot Surface	\$0	\$485	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$485
Other	\$0	\$0	\$0	\$4	\$4	\$15	\$16	\$4	\$17	\$20	\$79
Roof	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,203	\$0	\$1,203
Ventilation System	\$0	\$417	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$417
Multimodal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$87	\$87
Building Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$87	\$87
Storage	\$0	\$0	\$0	\$743	\$0	\$0	\$0	\$0	\$0	\$787	\$1,531
Building Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Heating System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lot Surface	\$0	\$0	\$0	\$743	\$0	\$0	\$0	\$0	\$0	\$0	\$744
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plumbing System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Roof	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$787	\$787
Ventilation System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer Center	\$0	\$6	\$339	\$5,628	\$4,608	\$5,721	\$3	\$3	\$2,240	\$113	\$18,662
Building Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$1	\$0	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$6
Heating System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lot Surface	\$0	\$6	\$286	\$5,344	\$4,608	\$5,720	\$2	\$2	\$2,239	\$1	\$18,208
Other	\$0	\$0	\$53	\$284	\$0	\$0	\$0	\$0	\$0	\$0	\$337
Roof	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$111	\$111
Vehicle Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$2
Lot Surface	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$2
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Rural Agencies (5311)	\$21,100	\$15,250	\$7,291	\$8,734	\$12,828	\$7,187	\$13,147	\$13,455	\$17,745	\$29,281	\$146,019
1. Vehicles	\$21,100	\$14,723	\$6,749	\$8,721	\$12,246	\$7,164	\$13,123	\$13,134	\$17,721	\$28,589	\$143,269
Buses	\$3,494	\$1,532	\$0	\$1,767	\$0	\$0	\$139	\$1,884	\$3,302	\$6,807	\$18,926
Large Bus (>35 pass)	\$1,027	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,352	\$2,100	\$4,479
Medium Bus (25-35 pass)	\$2,467	\$1,532	\$0	\$1,641	\$0	\$0	\$0	\$1,884	\$1,949	\$4,708	\$14,182
Small Bus (<25 pass)	\$0	\$0	\$0	\$126	\$0	\$0	\$139	\$0	\$0	\$0	\$265
Paratransit and Vans	\$17,605	\$13,101	\$6,749	\$6,954	\$12,011	\$7,024	\$12,911	\$11,195	\$14,284	\$21,701	\$123,535
Car	\$350	\$52	\$161	\$222	\$0	\$238	\$61	\$64	\$66	\$204	\$1,418
Heavy Duty	\$520	\$0	\$0	\$0	\$0	\$154	\$0	\$165	\$0	\$0	\$840
Light-Duty (12-pass)	\$2,357	\$2,990	\$1,140	\$1,096	\$1,396	\$1,986	\$1,776	\$677	\$1,802	\$5,491	\$20,711
Medium-Duty (14-pass)	\$8,150	\$5,392	\$3,780	\$3,261	\$7,907	\$2,096	\$3,409	\$5,880	\$8,188	\$11,566	\$59,628
Mini-Van	\$3,851	\$2,019	\$536	\$1,442	\$1,894	\$2,079	\$2,767	\$1,718	\$3,227	\$2,931	\$22,464
Raised Roof Van	\$0	\$52	\$0	\$55	\$57	\$0	\$0	\$0	\$132	\$68	\$364
Super Medium-Duty (22-pass)	\$2,377	\$2,597	\$1,132	\$878	\$758	\$470	\$3,409	\$2,520	\$869	\$1,440	\$16,449
Super Medium-Duty Fixed Route	\$0	\$0	\$0	\$0	\$0	\$0	\$1,490	\$171	\$0	\$0	\$1,662
Non-Revenue Vehicles	\$0	\$90	\$0	\$0	\$235	\$140	\$73	\$55	\$135	\$80	\$808
Other	\$0	\$0	\$0	\$0	\$135	\$140	\$73	\$0	\$78	\$80	\$506
Service Vehicle	\$0	\$90	\$0	\$0	\$100	\$0	\$0	\$55	\$57	\$0	\$302
2. Facilities	\$0	\$527	\$542	\$13	\$581	\$23	\$24	\$321	\$24	\$692	\$2,749
Admin	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$0	\$0	\$9	\$12
Cooling System	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$0	\$1	\$1
Heating System	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$0	\$0	\$1	\$1
Lot Surface	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7	\$7
Combination (e.g., admin, storage) w/ maint.	\$0	\$246	\$0	\$0	\$567	\$7	\$8	\$8	\$8	\$29	\$873
Equipment	\$0	\$69	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$89
Lot Surface	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$1	\$3
Other	\$0	\$176	\$0	\$0	\$0	\$7	\$7	\$8	\$8	\$8	\$214
Roof	\$0	\$0	\$0	\$0	\$567	\$0	\$0	\$0	\$0	\$0	\$567

Maintenance	\$0	\$282	\$542	\$13	\$14	\$15	\$15	\$313	\$15	\$654	\$1,864
Equipment	\$0	\$0	\$0	\$13	\$13	\$14	\$14	\$15	\$15	\$16	\$99
Heating System	\$0	\$0	\$0	\$1	\$1	\$1	\$1	\$298	\$0	\$0	\$301
Lot Surface	\$0	\$282	\$291	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$573
Plumbing System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$319	\$320
Roof	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$319	\$319
Ventilation System	\$0	\$0	\$251	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$251
Grand Total	\$43,638	\$44,292	\$44,087	\$46,583	\$57,968	\$49,416	\$49,228	\$52,444	\$54,161	\$55,896	\$497,715