COLORADO
Traffic Records Assessment

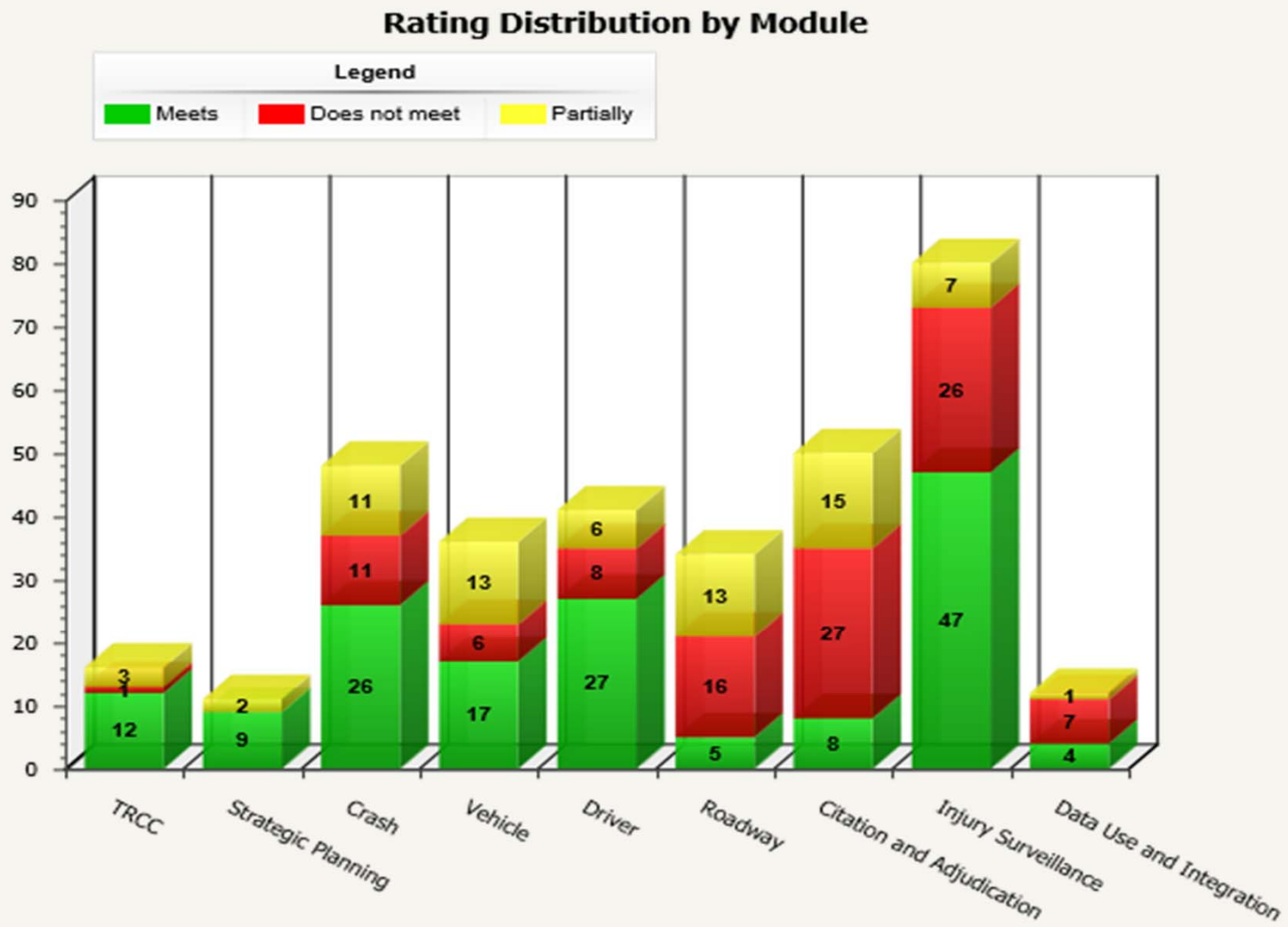
Maureen Johnson| December 11, 2019

Report Out Briefing

Question Response Summary

Advisory Module	Questions	Responses	Respondents
TRCC Management	16	35	10
Strategic Planning	11	15	4
Crash	48	79	10
Driver	41	41	1
Vehicle	36	36	2
Roadway	34	34	1
Citation / Adjudication	50	75	9
Injury Surveillance	80	84	3
Data Use & Integration	12	34	11
Total	328	433	---
Total Unique Respondents			16

Rating Distribution by Module



Colorado Strengths

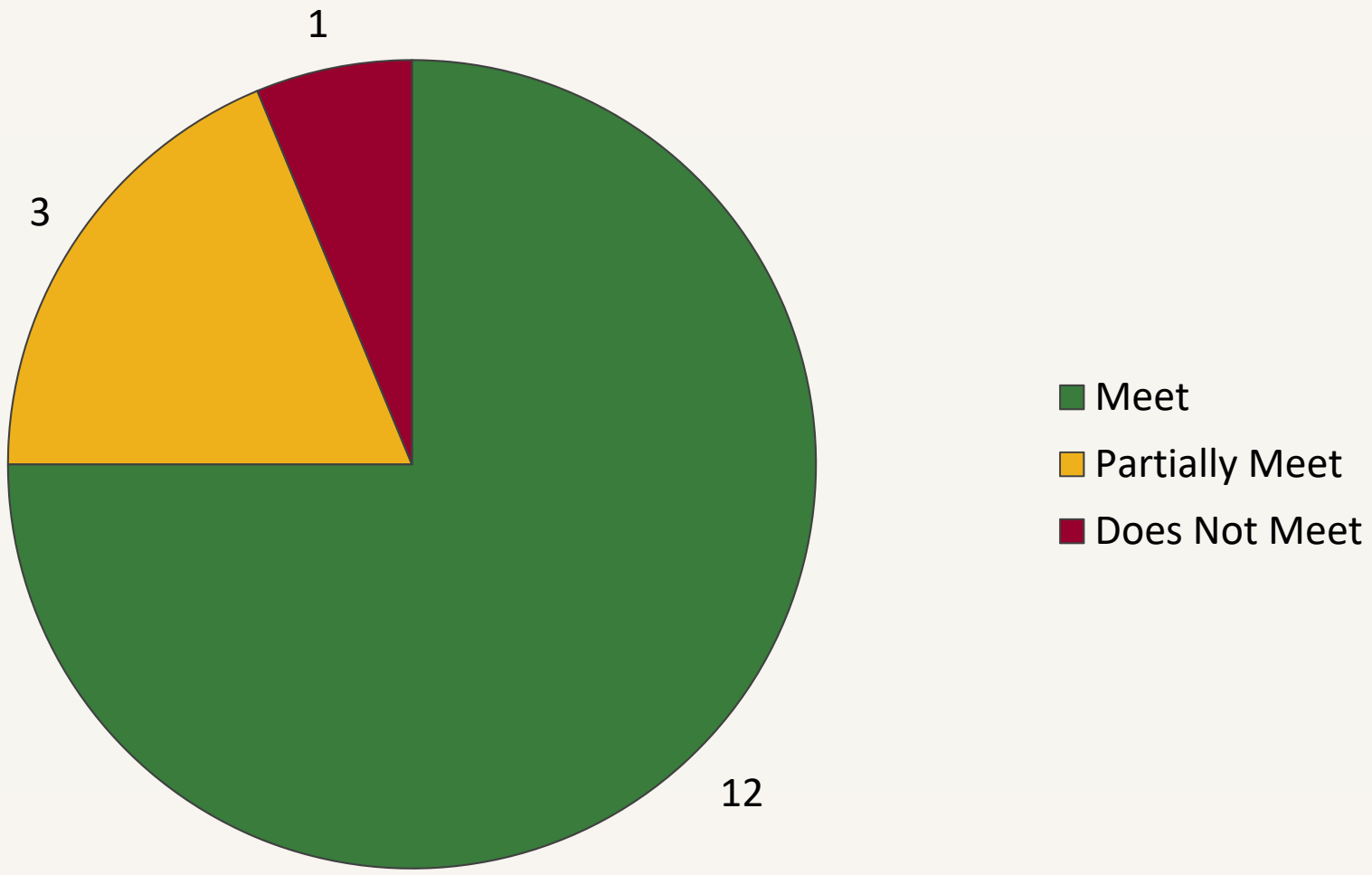
- The State has a strong State Traffic Records Advisory Committee (STRAC).
- CDOT is implementing a project that will provide a compatible location referencing system for all State public roads.
- Colorado has all five major components of an ISS and the available data are accessible to traffic safety stakeholders.
- CDOR has deployed a new driver, vehicle and crash traffic records system know as DRIVES (Driver License, Record, Identification and Vehicle Enterprise Solution).
- Colorado will implement the AAMVA State-to-State (S2S) program by January 2020.
- The State has developed an excellent data governance framework through its Government Data Advisory Board.

Change in Ratings

Change in Ratings from 2015 Assessment

	Meets	Partially Meets	Does Not Meet
TRCC Management	0	-1	1
Strategic Planning	5	-2	-3
Crash	-6	6	0
Vehicle	-5	9	-4
Driver	0	1	-1
Roadway	2	2	-4
Citation & Adjudication	-5	1	4
Injury Surveillance	8	-3	-5
Data Use and Integration	2	-2	0
Total	1	11	-12

TRCC Management



TRCC Management

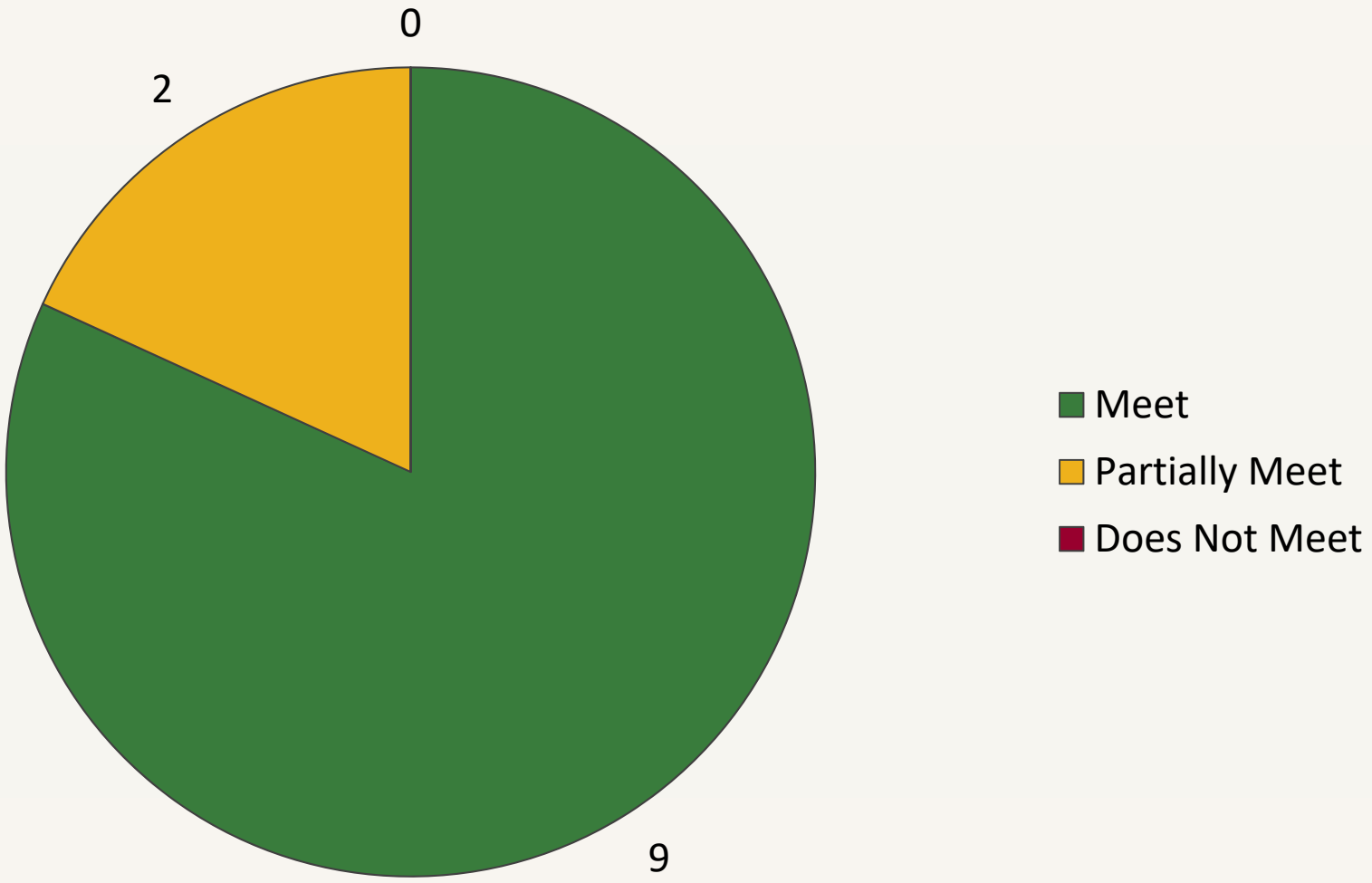
Recommendations

- None

Considerations:

- Create data quality performance measures for all six traffic records systems.
- Enhance the Traffic Records Resource Guide and Inventory to include the data elements and attributes available in the traffic records systems.

Strategic Planning



Strategic Planning

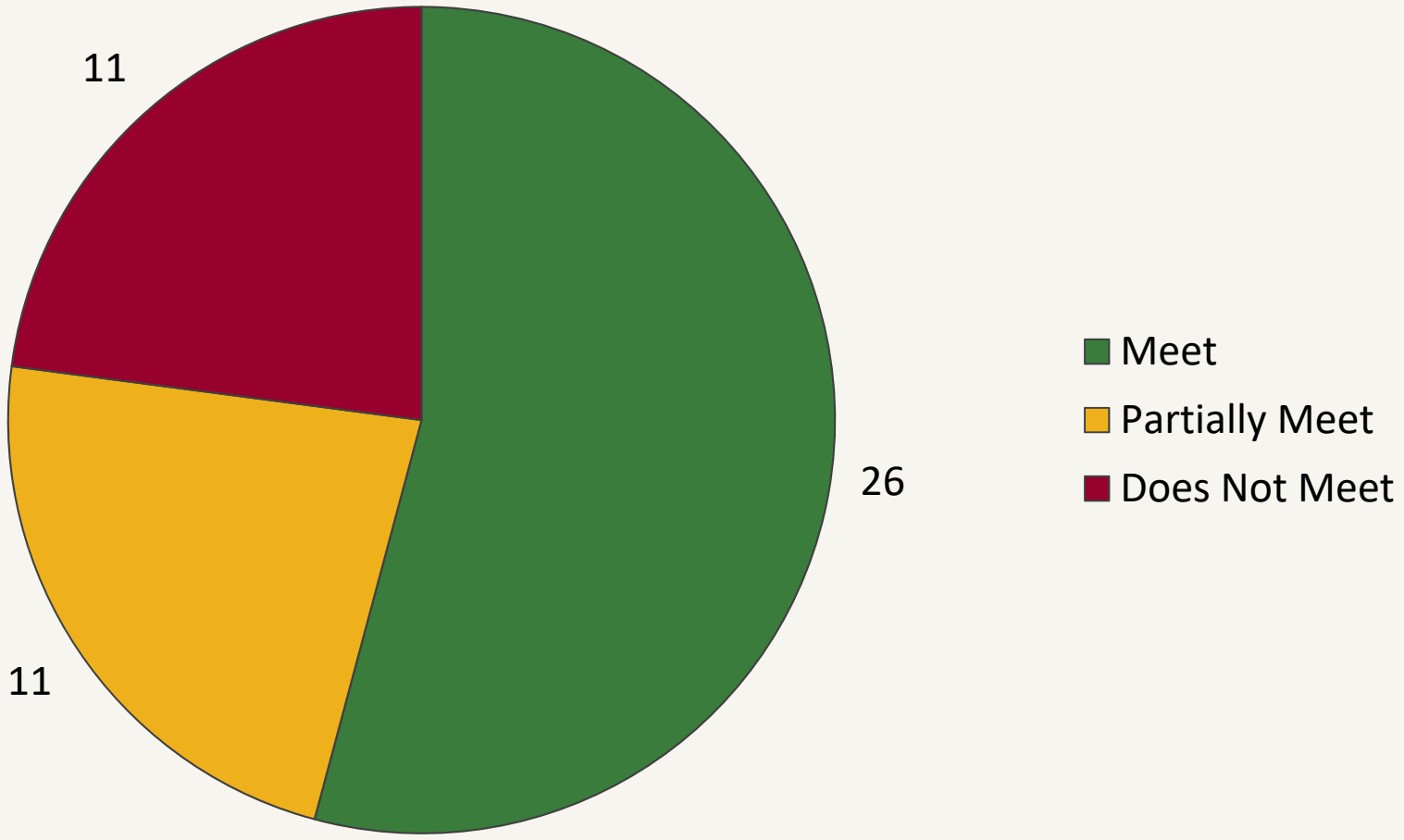
Recommendations

- None

Considerations:

- Expand the grant application distribution beyond law enforcement agencies and include specific questions in surveys to data users to understand training and technical assistance needs.
- Include update on status of activities and reflect any new information on annual update of Strategic Plan.
- Expand the dissemination of the Strategic Plan and consider ways to further buy in and understanding of the State's strategic traffic records goals to its partner agencies.

Crash



Crash

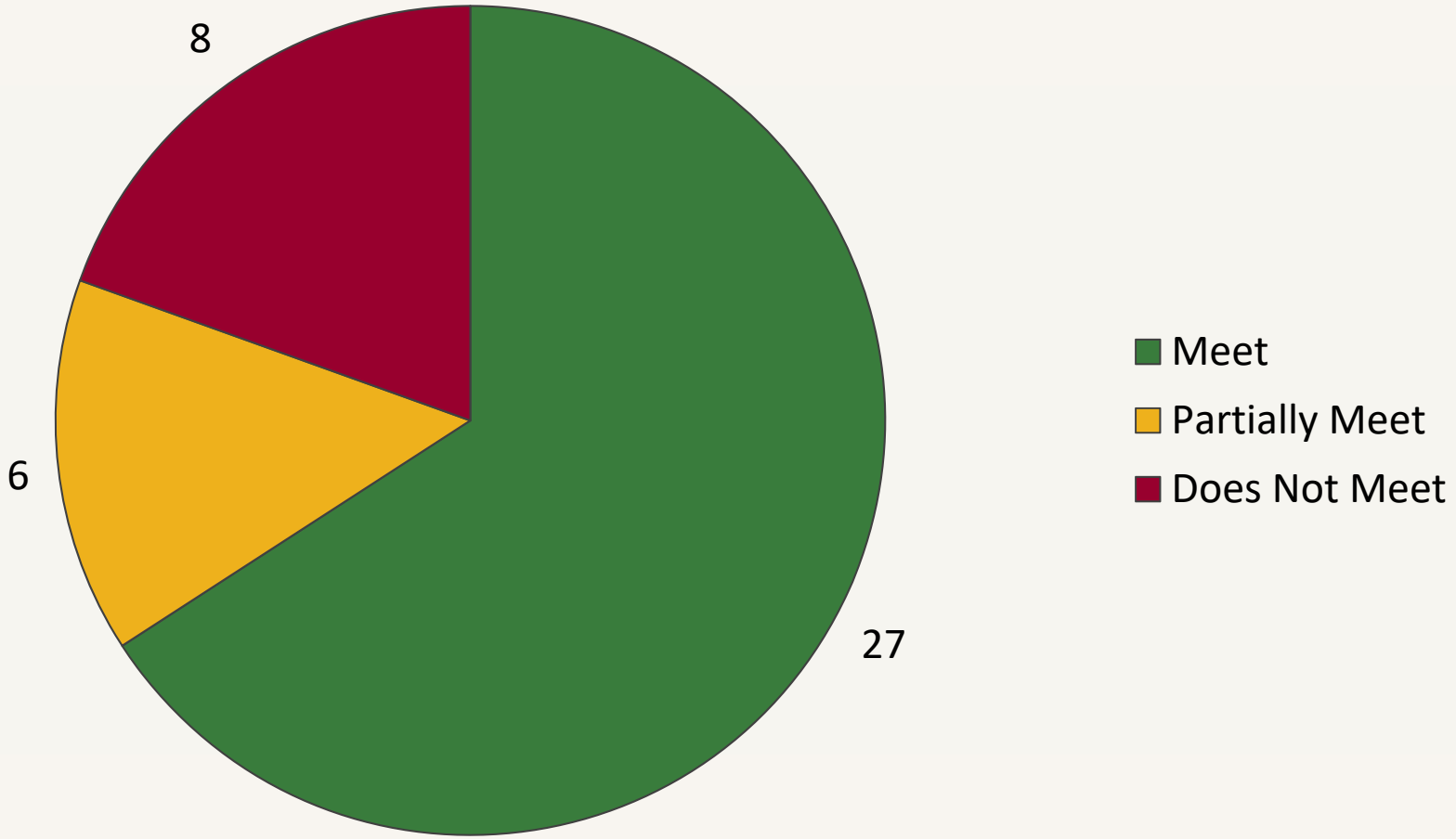
Recommendations

- Improve the data dictionary for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations:

- Implement a formal crash record retention policy.
- Develop performance measurements for accessibility, uniformity and integration which includes the calculation method, a baseline, actual values and percent change.

Driver



Driver

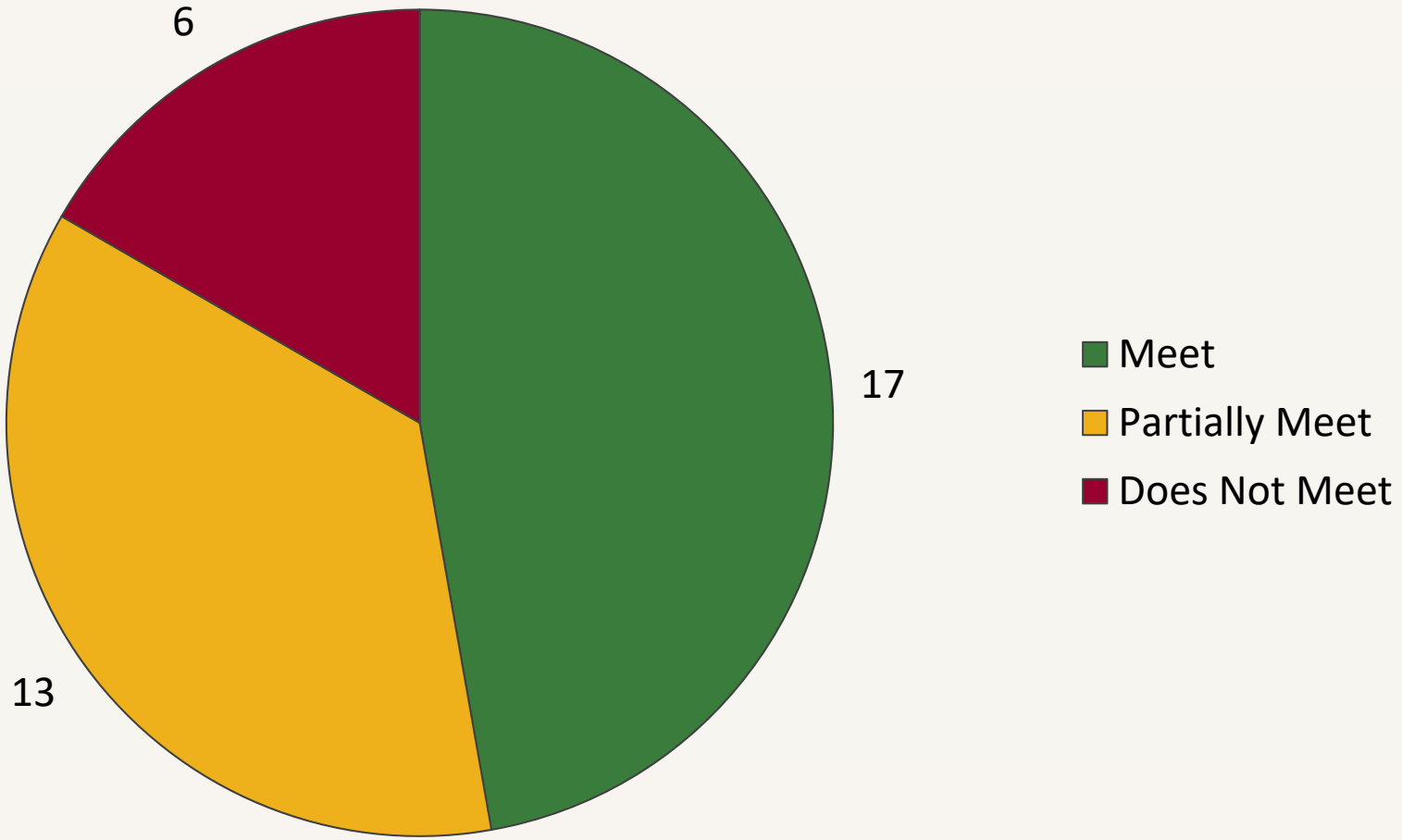
Recommendations

- Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations:

- Establish a separate DUI tracking system, based on the driver, vehicle, and crash data that are integrated in the DRIVES system.
- Conduct periodic comparative and trend analyses to examine and evaluate variations in quality of driver data across years.
- Provide driver data system quality management reports based on performance measures to STRAC for regular review.

Vehicle



Vehicle

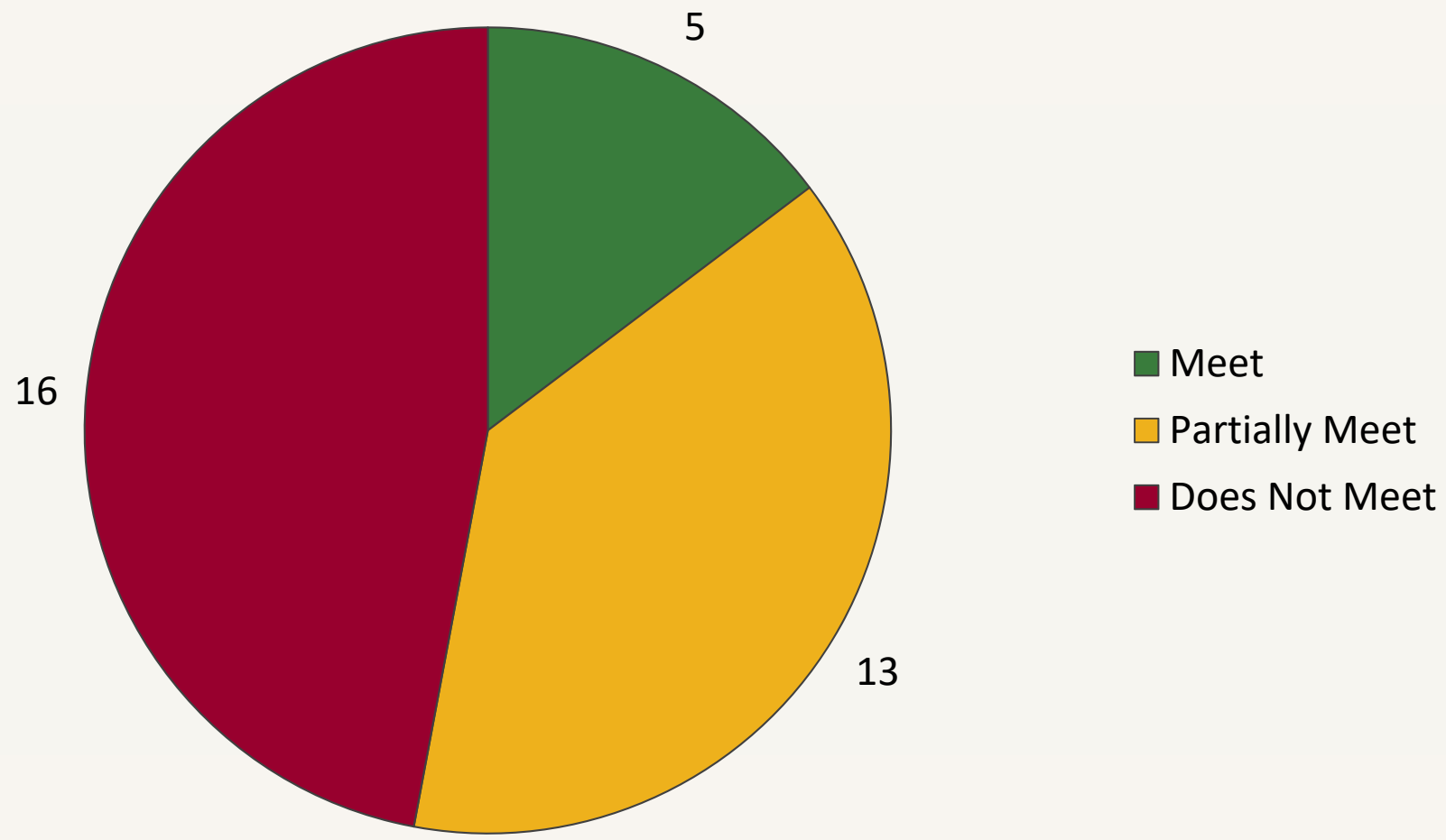
Recommendations

- Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations:

- Provide the STRAC with regular vehicle data quality management reports.

Roadway



Roadway

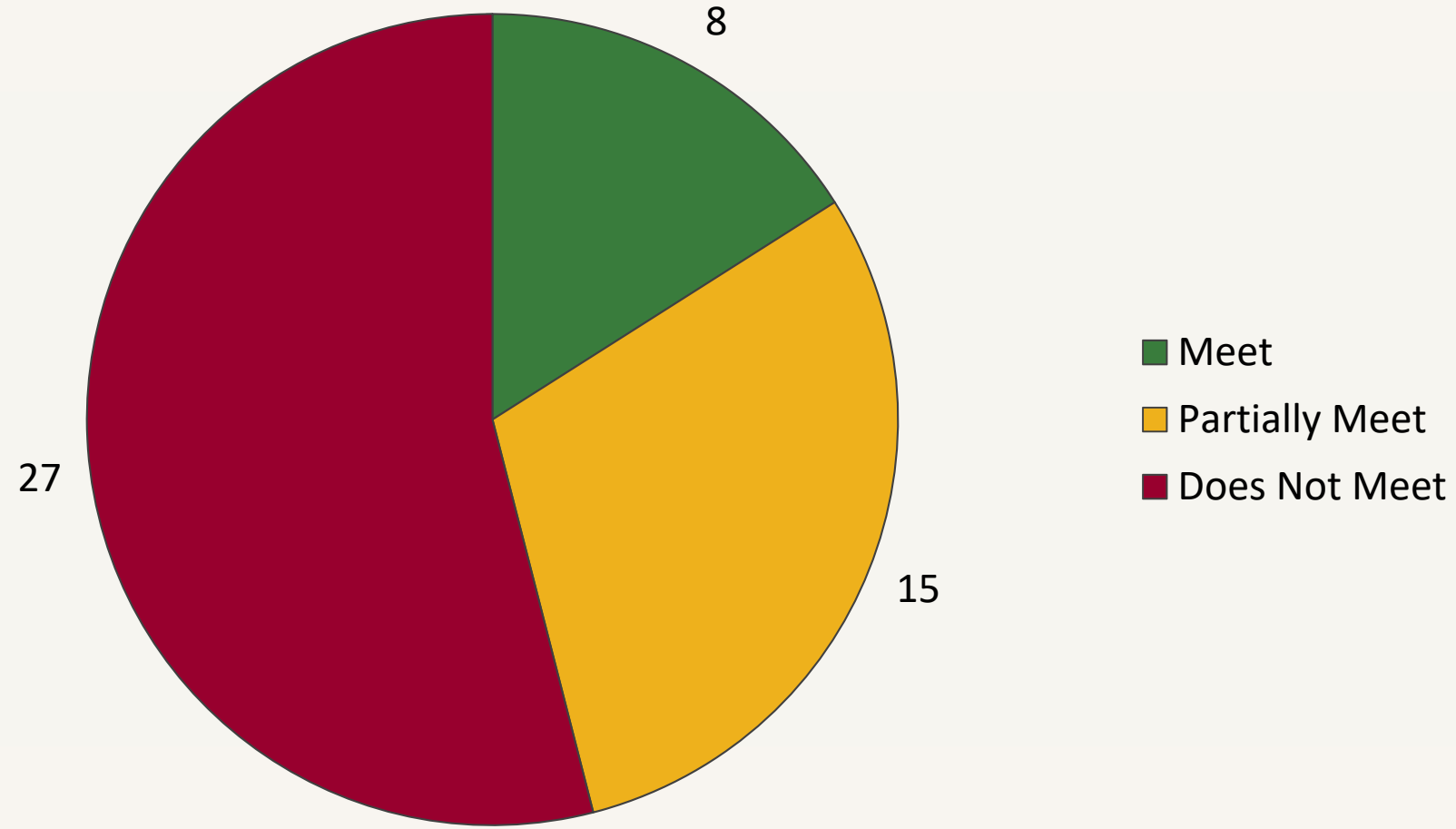
Recommendations

- Improve the data dictionary for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations:

- Develop an enterprise roadway system including at least the MIRE Fundamental Data elements (FDEs) for all Colorado Public Roads.
- Develop a comprehensive data dictionary for the enterprise roadway system.
- Develop roadway core system performance measures for monitoring and reporting progress of the data quality characteristics.
- Develop a representative group of local and State roadway system safety stakeholders.

Citation/Adjudication



Citation/Adjudication

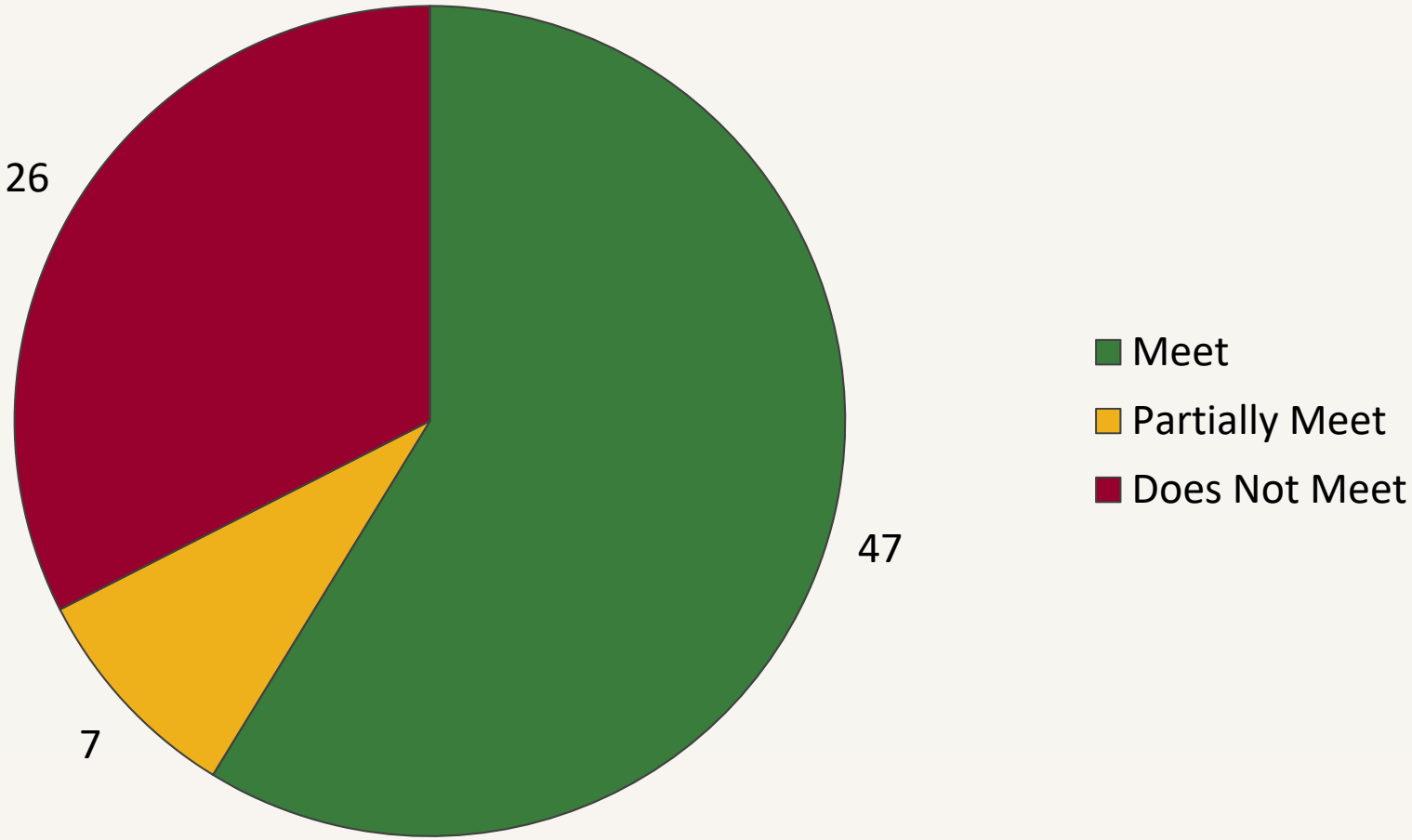
Recommendations

- Improve the data dictionary for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations:

- Evaluate feasibility for all courts to utilize one case management system which is electronically integrated with the Department of Motor Vehicles.
- Develop performance measures based on the rich data contained in the various State systems.
- Evaluate possibility to have a statewide series of unique citation numbers.

Injury Surveillance



Injury Surveillance

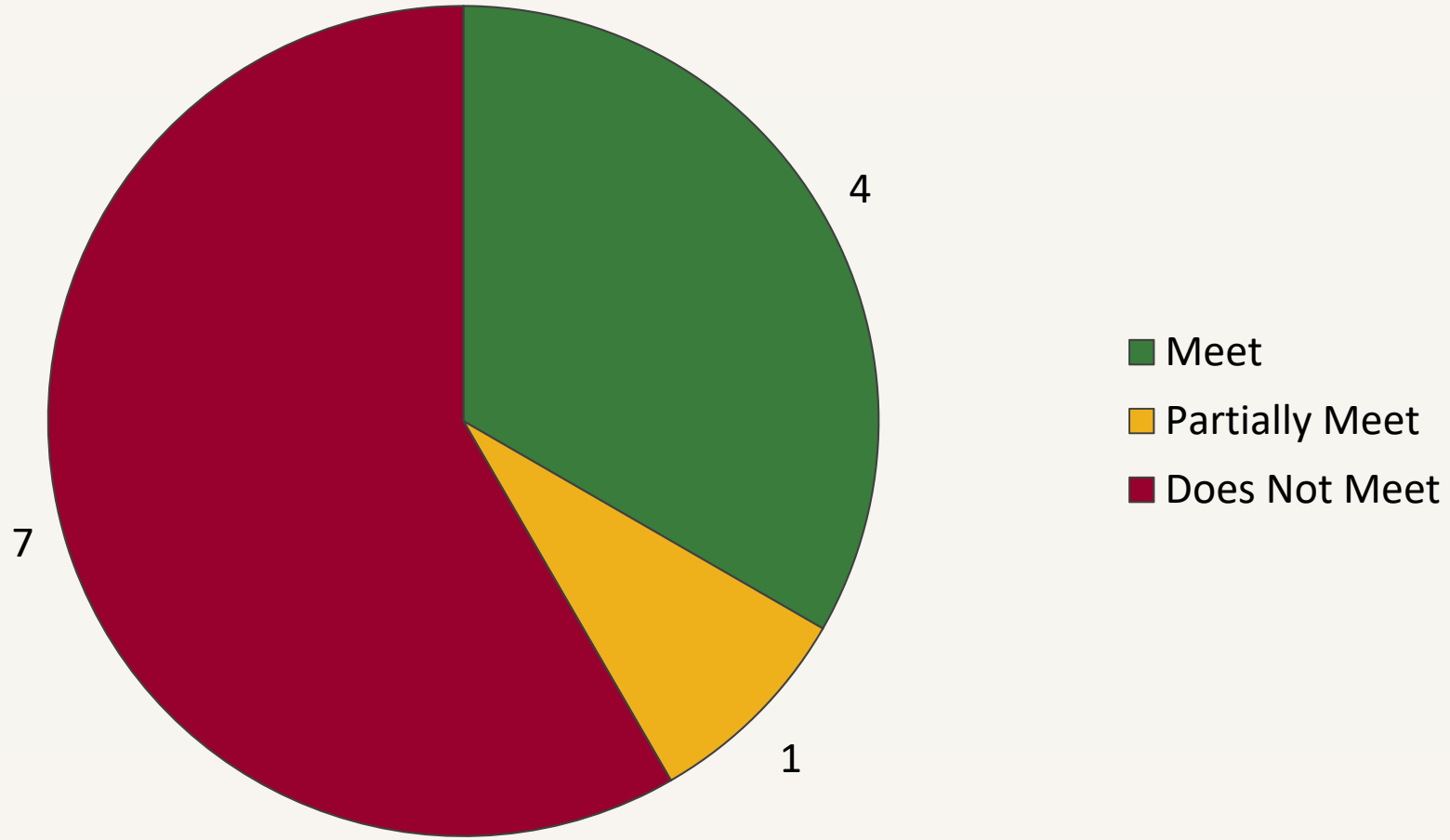
Recommendations

- Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Considerations:

- Develop formal performance measures, including baseline, timeline, and goal metrics, and implementing regular reviews of those measures.
- Work with data managers to provide quality reports to the Traffic Records Coordinating Committee on a regular schedule.
- Gain access to the Colorado Hospital Association data dictionaries for user purposes only.
- Explore the development of an interface between the EMS and trauma data systems, since both exist on the same ImageTrend software platform.

Data Use & Integration



Data Use & Integration

Recommendations

- None

Considerations:

- Continue the linkage efforts begun through the CDC pilot projects.
- Use the data set developed through the CDC effort and through the DRIVES system to conduct small-scale evaluations of existing highway safety programs (i.e. teen drivers).

Training and Technical Assistance Programs

NEXT STEPS

Traffic Records Assessments

In comparing a State's traffic records system to the ideal outlined in the *Advisory*, assessments:

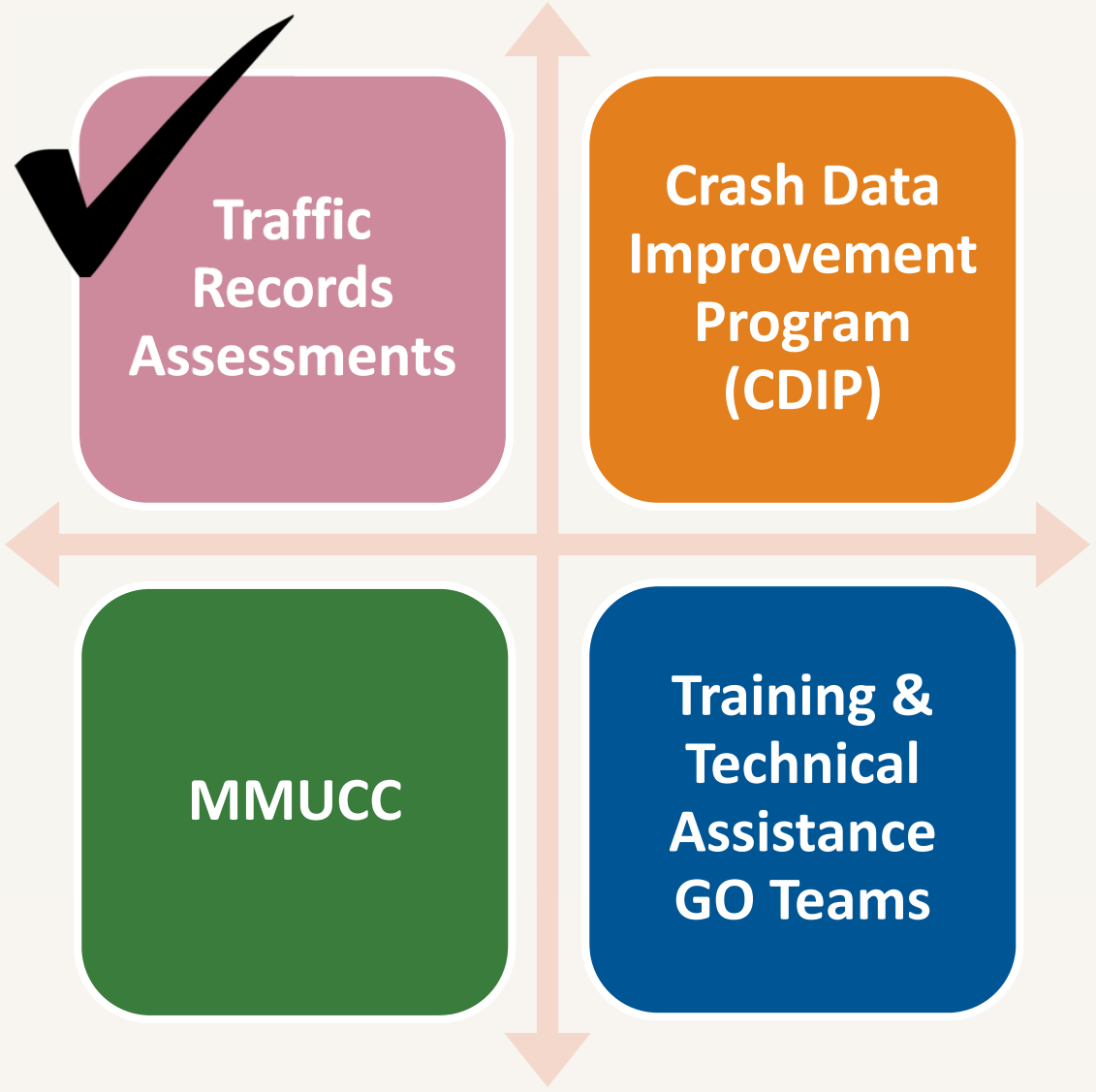
- **Identify strengths and challenge areas**
- **Rank questions to help prioritize investment**
- **Supply recommendations & considerations for improvement**

How do we move forward?

Traffic Records Core Programs

Next Steps…

- GO Team
- Crash Data Improvement Program (CDIP)
- MMUCC Mapping



Technical Assistance: GO Teams

State requests technical assistance on a specific TR issue

State, working with its RPM and the TR Team, prepares a request

NHTSA identifies GO Team members & sends to State

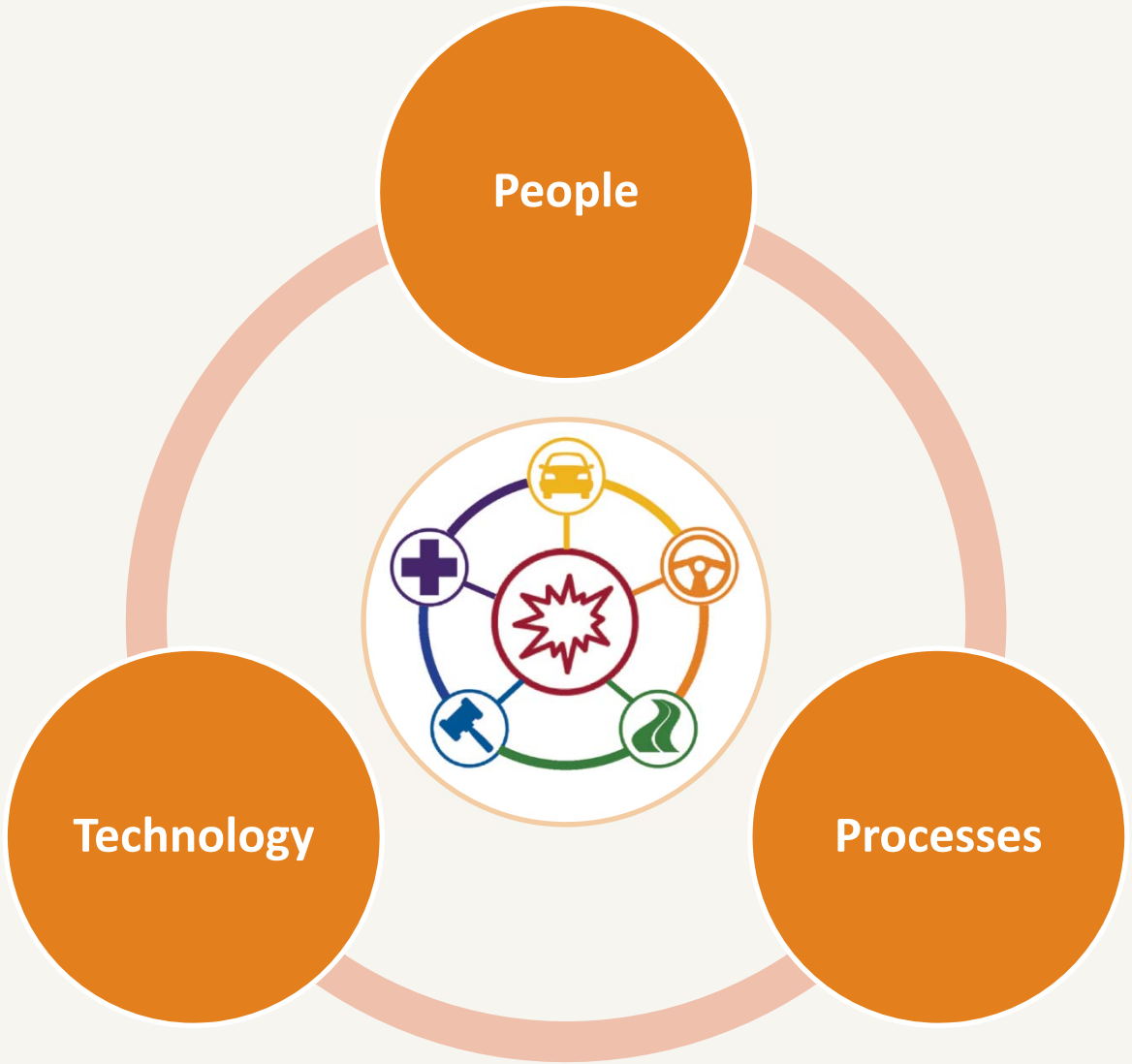
- Small-to-medium scope projects
- Number of GO Teams depends upon available resources
- GO Teams work ***with*** States to accomplish goals

Successful GO Team Applications

- A detailed description of the technical issues that the GO Team will need to address;
- A description of the specific technical assistance being requested from the GO Team;
- A description of the current and past efforts to address this problem;
- An explanation of how the GO Team assistance fits into the TRCC's Strategic Plan;
- The anticipated improvements that the GO Teams are likely to provide to the State's traffic records data systems; and
- The contact information of the State officials who will be tasked to work with the GO Team to address this problem.

Crash Data Improvement Program

Improving Crash Data is not just an IT problem…



MMUCC Mappings

- **How mappable are your form and database?**

Crash Data Elements

Identifier	Data Element	Percent Mappable
C1	Case Identifier	100.0%
C2	Crash Classification	20.0%
C3	Crash Date and Time	100.0%
C4	Crash County	100.0%
C5	Crash City/Place	100.0%
C6	Crash Location	100.0%
C7	First Harmful Event	0.0%
C8	Location of First Harmful Event Relative to the Trafficway	0.0%
C9	Manner of Crash/Collision Impact	77.8%
C10	Source of Information	50.0%
C11	Weather Conditions	41.7%
C12	Light Condition	87.5%
C13	Roadway Surface Condition	81.8%
C14	Contributing Circumstances, Environment	57.1%
C15	Contributing Circumstances, Road	29.2%
C16	Relation to Junction	35.3%
C17	Type of Intersection	12.5%
C18	School-Bus-Related	0.0%
C19	Work Zone-Related (Construction/Maintenance/Utility)	21.1%

Vehicle Data Elements

Identifier	Data Element	Percent Mappable
V1	Motor Vehicle Identification Number (VIN)	100.0%
V2	Motor Vehicle Unit Type and Number	25.0%
V3	Motor Vehicle Registration State and Year	100.0%
V4	Motor Vehicle License Plate Number	100.0%
V5	Motor Vehicle Make	100.0%
V6	Motor Vehicle Model Year	100.0%
V7	Motor Vehicle Model	100.0%
V8	Motor Vehicle Body Type Category	63.2%
V9	Total Occupants in Motor Vehicle	100.0%
V10	Special Function of Motor Vehicle in Transport	81.8%
V11	Emergency Motor Vehicle Use	0.0%
V12	Motor Vehicle Posted/Statutory Speed Limit	66.7%
V13	Direction of Travel Before Crash	83.3%
V14	Trafficway Description	50.0%
V15	Total Lanes in Roadway	0.0%
V16	Roadway Alignment and Grade	37.5%
V17	Traffic Control Device Type	78.6%
V18	Motor Vehicle Manuaver/Action	93.3%
V19	Vehicle Damage	58.8%
V20	Sequence of Events	89.6%
V21	Most Harmful Event for this Motor Vehicle	0.0%
V22	Bus Use	0.0%
V23	Hit and Run	100.0%
V24	Towed Due to Disabling Damage	0.0%
V25	Contributing Circumstances, Motor Vehicle	74.2%
V26	Motor Carrier Identification	25.0%
V27	Gross Vehicle Weight Rating/Gross Combination Weight Rating	100.0%
V28	Vehicle Configuration	66.7%
V29	Cargo Body Type	82.4%
V30	Hazardous Materials (Cargo Only)	100.0%

Person Data Elements

Identifier	Data Element	Percent Mappable
P1	Name of Person Involved	100.0%
P2	Date of Birth	50.0%
P3	Sex	100.0%
P4	Person Type	44.4%
P5	Injury Status	100.0%
P6	Occupant's Motor Vehicle Unit Number	100.0%
P7	Seating Position	72.2%
P8	Restraint Systems/Motorcycle Helmet Use	35.3%
P9	Air Bag Deployed	62.5%
P10	Ejection	60.0%
P11	Driver License Jurisdiction	0.0%
P12	Driver License Number, Class, CDL and Endorsements**	5.6%
P13	Speeding Related	0.0%
P14	Driver Actions at Time of Crash	26.3%
P15	Violation Codes	33.3%
P16	Driver Distracted By	0.0%
P17	Condition at Time of the Crash	37.5%
P18	Law Enforcement Suspects Alcohol Use	0.0%
P19	Alcohol Test	63.6%
P20	Law Enforcement Suspects Drug Use	0.0%
P21	Drug Test	30.0%
P22	Non-Motorist Number	100.0%
P23	Non-Motorist Action/Circumstance Prior to Crash	64.3%
P24	Non-Motorist Actions/Circumstances at Time of Crash	57.1%
P25	Non-Motorist Location at Time of Crash	0.0%
P26	Non-Motorist Safety Equipment	31.3%
P27	Unit Number of Motor Vehicle Striking Non-Motorist	0.0%
P28	Transported to First Medical Facility By	11.1%

Next Steps

- **Contact your NHTSA Regional Program Manager about the necessary TRCC Strategic Plan updates required prior to next §405(c) grant application.**

- **Use the *Advisory* as a resource for developing, prioritizing, and executing new projects and programs.**

- **If desired, submit your application to your NHTSA Regional Program Manager to apply for a GO Team, CDIP, or MMUCC mapping to help with assessment recommendations or other traffic records initiatives identified by the TRCC.**

Application

Becoming an Assessor

- **If you would like to be considered as an assessor for future assessments of other States' traffic records systems please email Kara Mueller and copy John Siegler.**
  - Kara Mueller – kara.mueller.ctr@dot.gov
  - John Siegler – john.siegler@dot.gov
- **Please identify your areas of traffic records expertise and include a brief summary of your work experience.**

Thank You