



Durham – Chapel Hill – Carrboro Metropolitan Planning Organization

Member Organizations: Town of Carrboro, Town of Chapel Hill, Chatham County, City of Durham, Durham County, Town of Hillsborough, NC Department of Transportation, Orange County, GoTriangle

Date: February 14, 2018
Memo To: DCHC MPO Board
From: DCHC MPO Staff

The purpose of this memo is to request the Board's endorsement of NCDOT's established safety Performance Measures Targets for 2018. Federal regulations require Metropolitan Planning Organizations (MPOs) and State Departments of Transportation (DOTs) to set targets for five safety performance measures. The targets must be established in cooperation and collaboration with transit operators, MPOs, NCDOT, Federal Highway Administration (FHWA), National Highway Transportation Safety Administration (NHTSA). Also, 23 CFR 490 and 23 CFR 450 detail regulations that State DOT's and MPO's must follow regarding the inclusion of performance measures into the planning process, and implementation and details of the performance management process (targets, measures, etc.). Accordingly, NCDOT worked in coordination and collaboration with MPOs and the aforementioned stakeholder in setting targets.

Five targets have been set the following safety performance measures and submitted to FHWA:

1. Number of fatalities,
2. Fatality Rate (per 100 million VMT)
3. Number of Serious Injuries
4. Serious Injury Rate (per 100 million VMT)
5. Number of Non-motorized (Pedestrians + Bicyclists) Fatalities and Serious Injuries.

Per section 490.209 (c), MPO's have 180 days from August 31, 2017 to establish a target by either:

- a. Agreeing to plan and program projects so that they contribute toward the accomplishment of NCDOT's safety target for that performance measure; or
- b. Committing to a quantifiable target for that performance measure for your metropolitan planning area.

NCDOT's 2018 Safety Targets are as follows:

Highway Safety Improvement Program (HSIP)

- For the 2018 Highway Safety Improvement Program (HSIP), the goal is to reduce total fatalities by 5.10 percent each year from 1,340.6 (2012-2016 average) to 1,207.3 (2014-2018 average) by December 31, 2018.
- For the 2018 Highway Safety Improvement Program (HSIP), the goal is to reduce the fatality rate by 4.75 percent each year from 1.228 (2012-2016 average) to 1.114 (2014-2018 average) by December 31, 2018.



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- For the 2018 Highway Safety Improvement Program (HSIP), the goal is to reduce total serious injuries by 5.10 percent each year from 2,399.8 (2012-2016 average) to 2,161.2 (2014-2018 average) by December 31, 2018.
- For the 2018 Highway Safety Improvement Program (HSIP), the goal is to reduce the serious injury rate by 4.75 percent each year from 2.191 (2012-2016 average) to 1.988 (2014-2018 average) by December 31, 2018.
- For the 2018 Highway Safety Improvement Program (HSIP), the goal is to reduce the total non-motorized fatalities and serious injuries by 5.30 percent each year from 438.8 (2012-2016 average) to 393.5 (2014-2018 average) by December 31, 2018.

The MPO Safety Measures Fact Sheet, prepared by FHWA is enclosed as attachment. Also attached for illustrative purposes is DCHC MPO safety data and targets.

MPO Board Action: Approve the attached Resolution endorsing Targets for safety performance measures established by NCDOT.

Metropolitan Planning Organization Safety Performance Measures Fact Sheet

Safety Performance Measures

The Safety Performance Management Measures regulation supports the Highway Safety Improvement Program (HSIP) and requires State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to set HSIP targets for 5 safety performance measures. This document highlights the requirements specific to MPOs and provides a comparison of MPO and State DOT responsibilities.

How do MPOs establish HSIP targets?

Coordination is the key for all stakeholders in setting HSIP targets. Stakeholders should work together to share data, review strategies and understand outcomes. MPOs must work with the State DOT. MPOs should also coordinate with the State Highway Safety Office, transit operators, local governments, the FHWA Division Office, National Highway Transportation Safety Administration (NHTSA) Regional Office, law enforcement and emergency medical services agencies, and others. By working together, considering and integrating the plans and programs of various safety stakeholders, MPOs will be better able to understand impacts to safety performance to establish appropriate HSIP targets. Coordination should start with the Strategic Highway Safety Plan (SHSP). More information on the SHSP is available at <http://safety.fhwa.dot.gov/hsip/shsp/>.

MPOs establish HSIP targets by either:

1. agreeing to plan and program projects so that they contribute toward the accomplishment of the State DOT HSIP target or
2. committing to a quantifiable HSIP target for the metropolitan planning area.

To provide MPOs with flexibility, MPOs may support all the State HSIP targets, establish their own specific numeric HSIP targets for all of the performance measures, or any combination. MPOs may support the State HSIP target for one or more individual performance measures and establish specific numeric targets for the other performance measures.

HSIP Safety Targets Established by MPOs	
1	Number of fatalities
2	Rate of fatalities
3	Number of serious injuries
4	Rate of serious injuries
5	Number of non-motorized fatalities and non-motorized serious injuries

If an MPO agrees to support a State HSIP target, the MPO would ...	If an MPO establishes its own HSIP target, the MPO would...
■ Work with the State and safety stakeholders to address areas of concern for fatalities or serious injuries within the metropolitan planning area ■ Coordinate with the State and include the safety performance measures and HSIP targets for all public roads in the metropolitan area in the MTP (Metropolitan Transportation Plan) ■ Integrate into the metropolitan transportation planning process, the safety goals, objectives, performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the SHSP ■ Include a description in the TIP (Transportation Improvement Program) of the anticipated effect of the TIP toward achieving HSIP targets in the MTP, linking investment priorities in the TIP to those safety targets	■ Establish HSIP targets for all public roads in the metropolitan planning area in coordination with the State ■ Estimate vehicles miles traveled (VMT) for all public roads within the metropolitan planning area for rate targets ■ Include safety (HSIP) performance measures and HSIP targets in the MTP ■ Integrate into the metropolitan transportation planning process, the safety goals, objectives, performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the SHSP ■ Include a description in the TIP of the anticipated effect of the TIP toward achieving HSIP targets in the MTP, linking investment priorities in the TIP to those safety targets



Volumes for HSIP Rate Targets: MPOs that establish fatality rate or serious injury rate HSIP targets must report the VMT estimate used for such targets, and the methodology used to develop the estimate, to the State DOT. For more information on volumes for HSIP rate targets, see http://www.fhwa.dot.gov/planning/processes/tools/technical_guidance/index.cfm.

Roads addressed by MPO HSIP Targets: HSIP targets cover all public roadways within the metropolitan planning area boundary regardless of ownership or functional classification, just as State HSIP targets cover all public roads in the State.

How do MPOs with multi-State boundaries establish HSIP targets?

MPOs with multi-State boundaries must coordinate with all States involved. If an MPO with multi-State boundaries chooses to support a State HSIP target, it must do so for each State. For example, an MPO that extends into two States would agree to plan and program projects to contribute to two separate sets of HSIP targets (one for each State). If a multi-State MPO decides to establish its own HSIP target, the MPO would establish the target for the entire metropolitan planning area.

When do MPOs need to establish these targets?

States establish HSIP targets and report them for the upcoming calendar year in their HSIP annual report that is due August 31 each year. MPOs must establish HSIP targets within 180 days of the State establishing and reporting its HSIP targets. Since FHWA deems the HSIP reports submitted on August 31, MPOs must establish HSIP targets no later than February 27 of each year.

Top 5 Things to Know about MPO HSIP Safety Performance Targets	
✓	All MPOs must set a target for each of the 5 HSIP Safety Performance Measures
✓	MPOs may adopt and support the State's HSIP targets, develop their own HSIP targets, or use a combination of both
✓	MPOs must establish their HSIP targets by February 27 of the calendar year for which they apply
✓	MPO HSIP targets are reported to the State DOT
✓	MPO HSIP targets are not annually assessed for significant progress toward meeting targets; State HSIP targets are assessed annually

Where do MPOs report targets?

While States report their HSIP targets to FHWA in their annual HSIP report, MPOs do not report their HSIP targets directly to FHWA. Rather, the State(s) and MPO mutually agree on the manner in which the MPO reports the targets to its respective DOT(s). MPOs must include baseline safety performance, HSIP targets and progress toward achieving HSIP targets in the system performance report in the MTP.

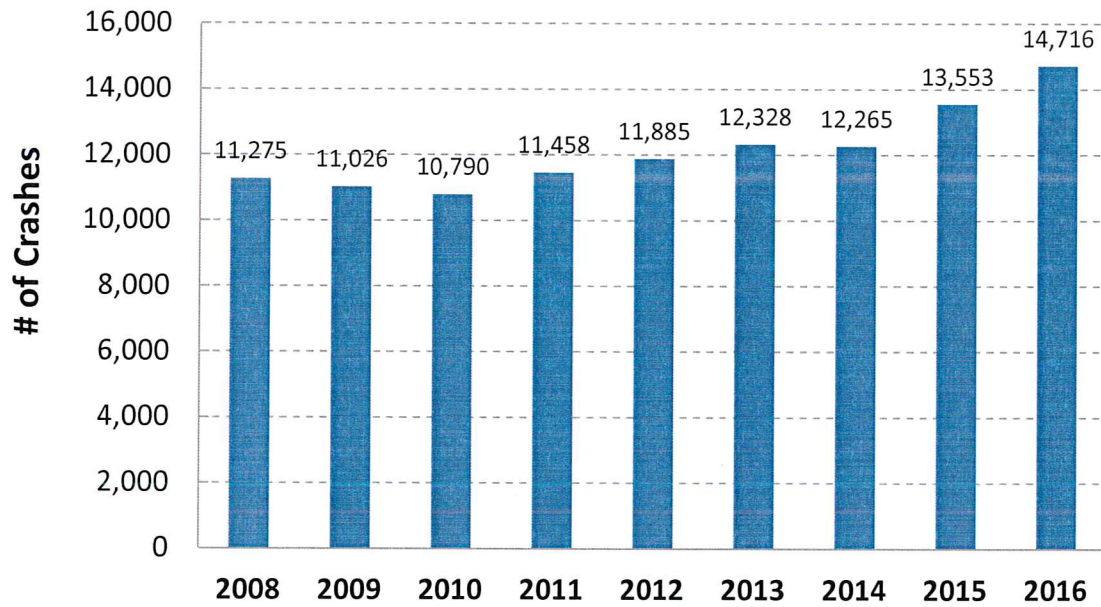
Whether an MPO agrees to support a State HSIP target or establishes its own HSIP target the MPO would include in the MTP a systems performance report evaluating the condition and performance of the transportation system with respect to the safety performance targets described in the MTP including progress achieved by the MPO in achieving safety performance targets

Assessment of Significant Progress

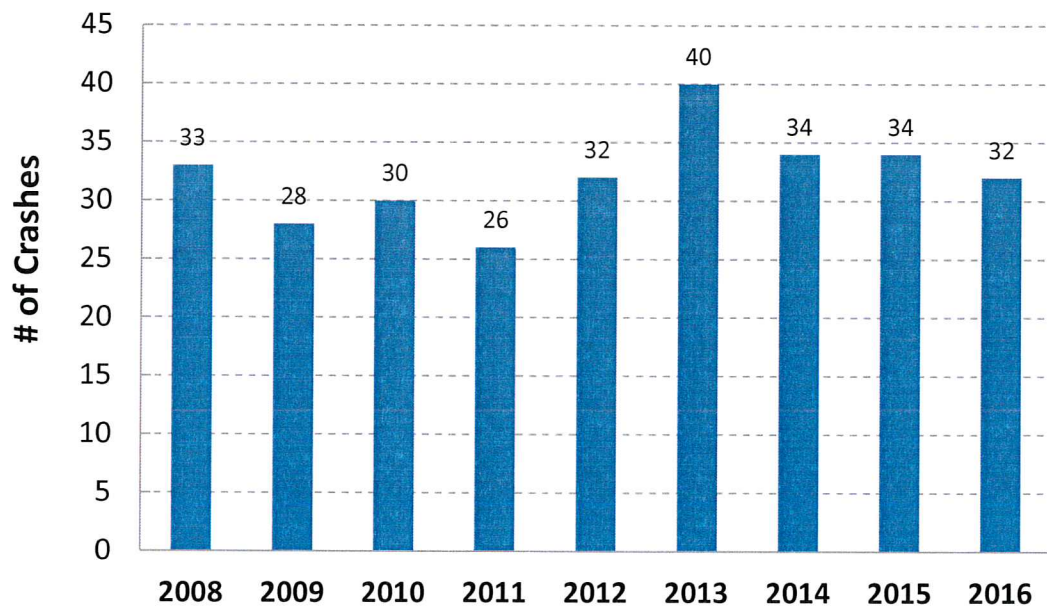
While FHWA will determine whether a State DOT has met or made significant progress toward meeting HSIP targets, it will not directly assess MPO progress toward meeting HSIP targets. However, FHWA will review MPO performance as part of ongoing transportation planning process reviews including the Transportation Management Area certification review and the Federal Planning Finding associated with the approval of the Statewide Transportation Improvement Program.

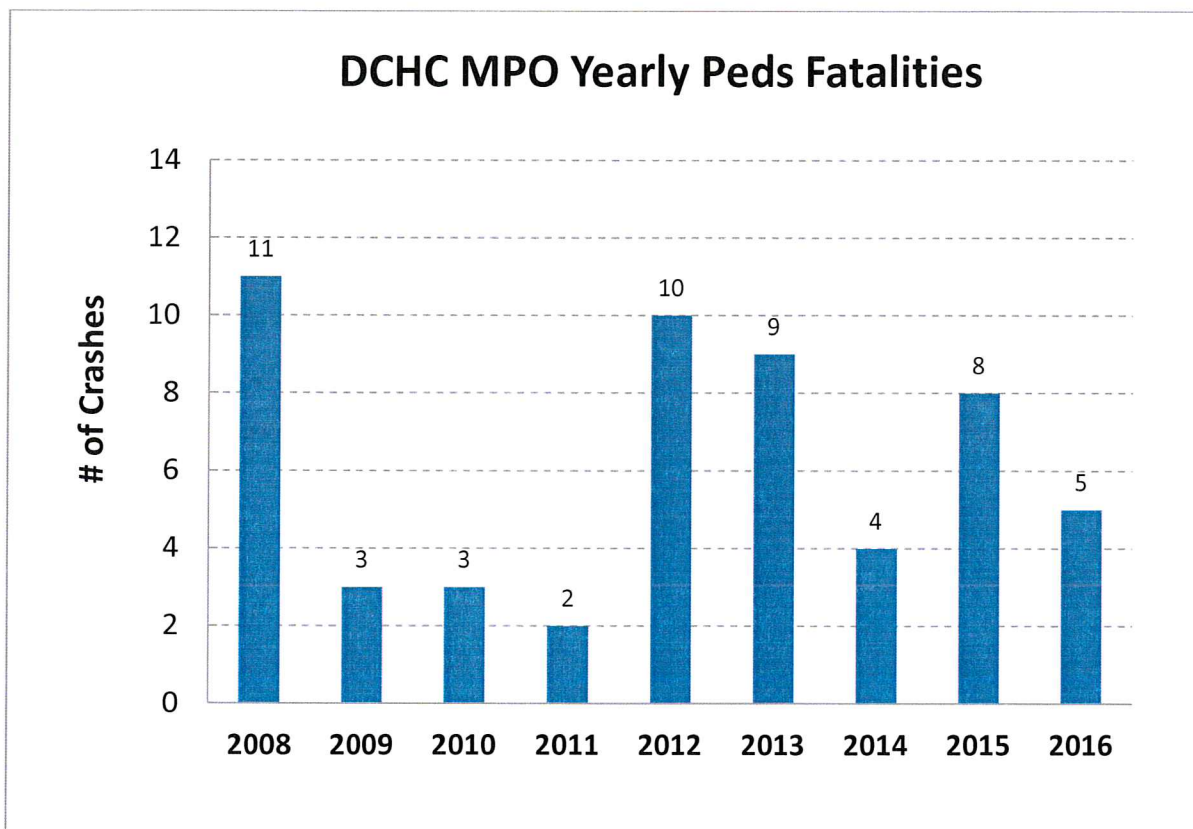
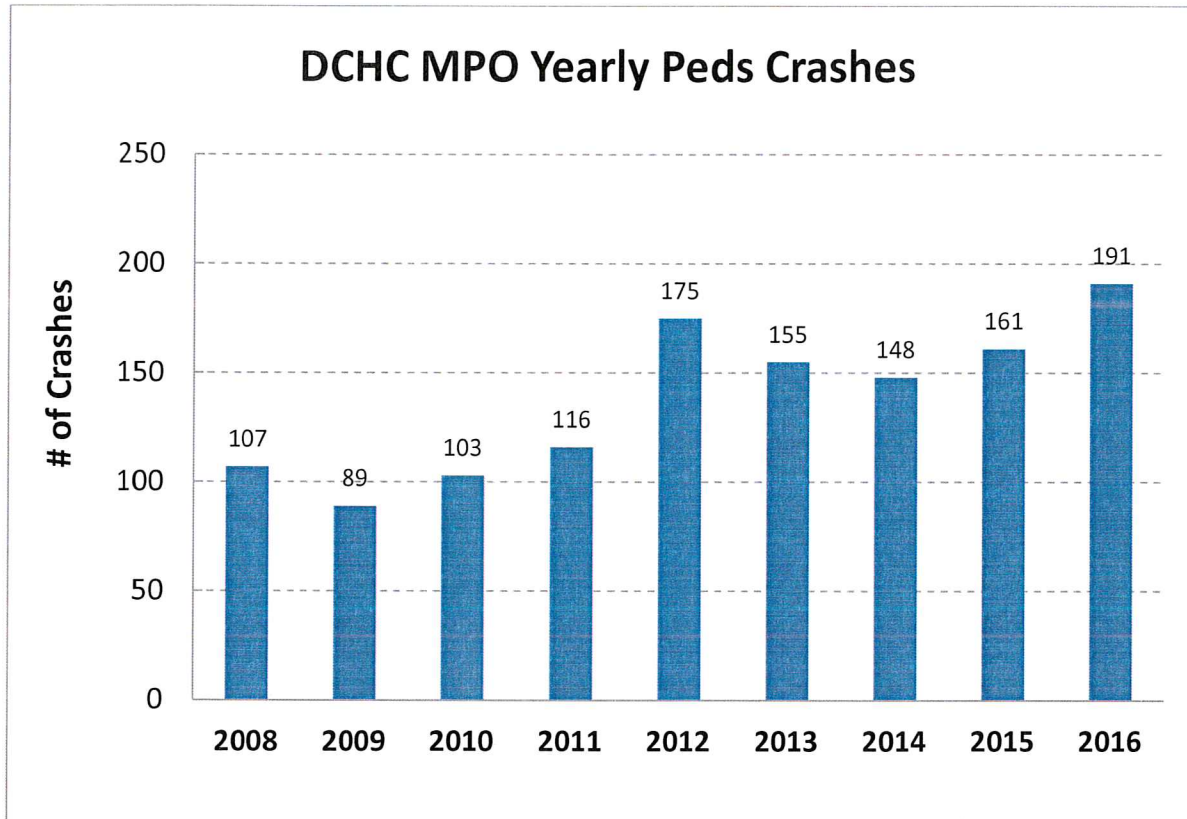


DCHC MPO Yearly Total Crashes

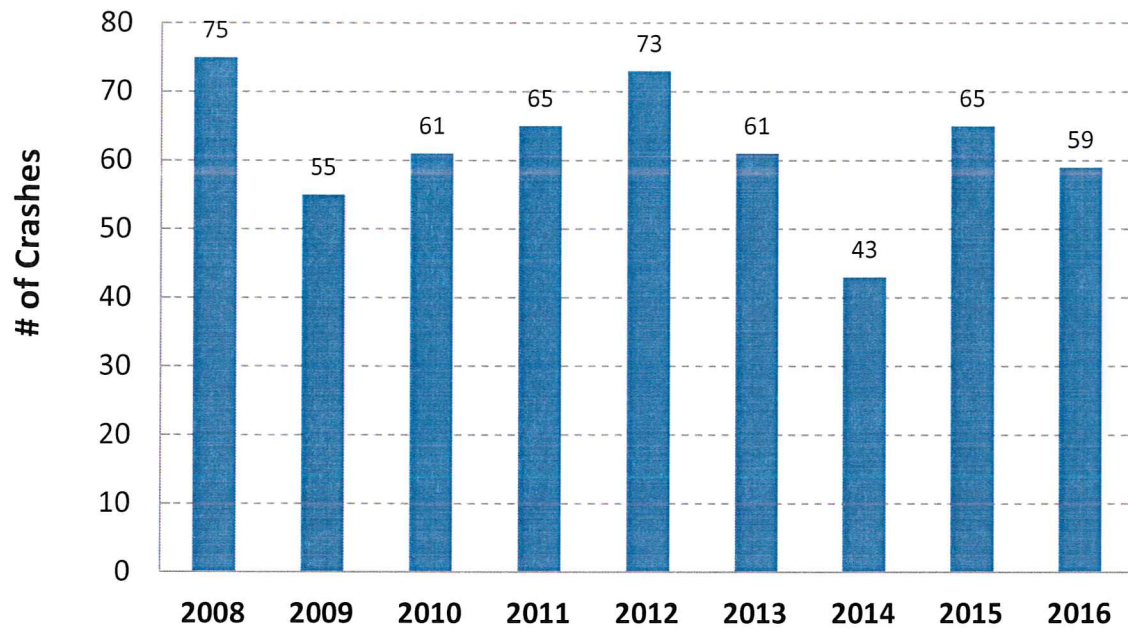


DCHC MPO Yearly Total Fatalities

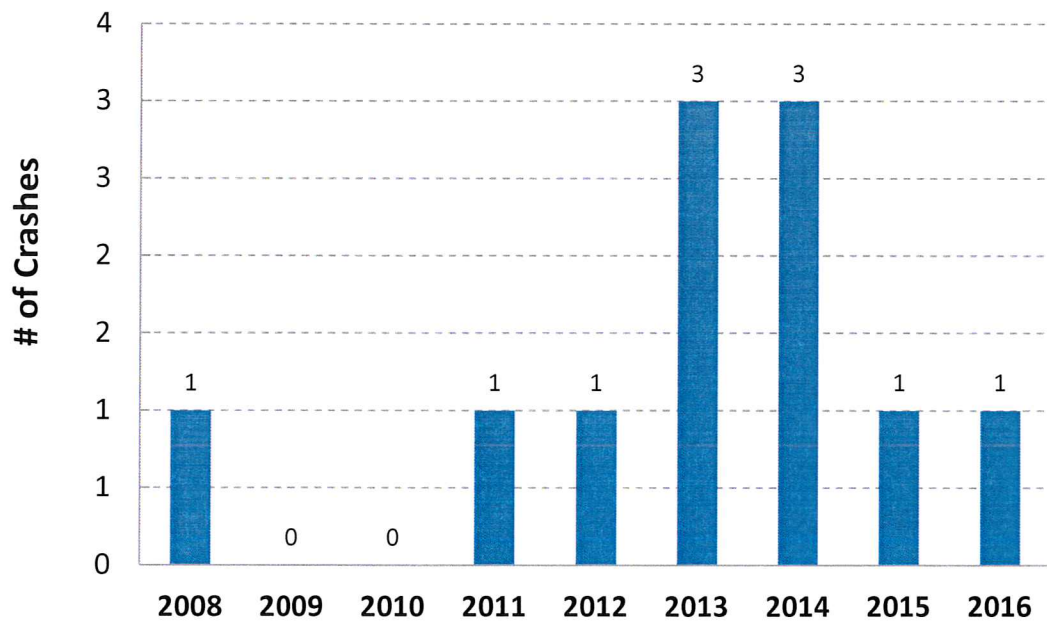


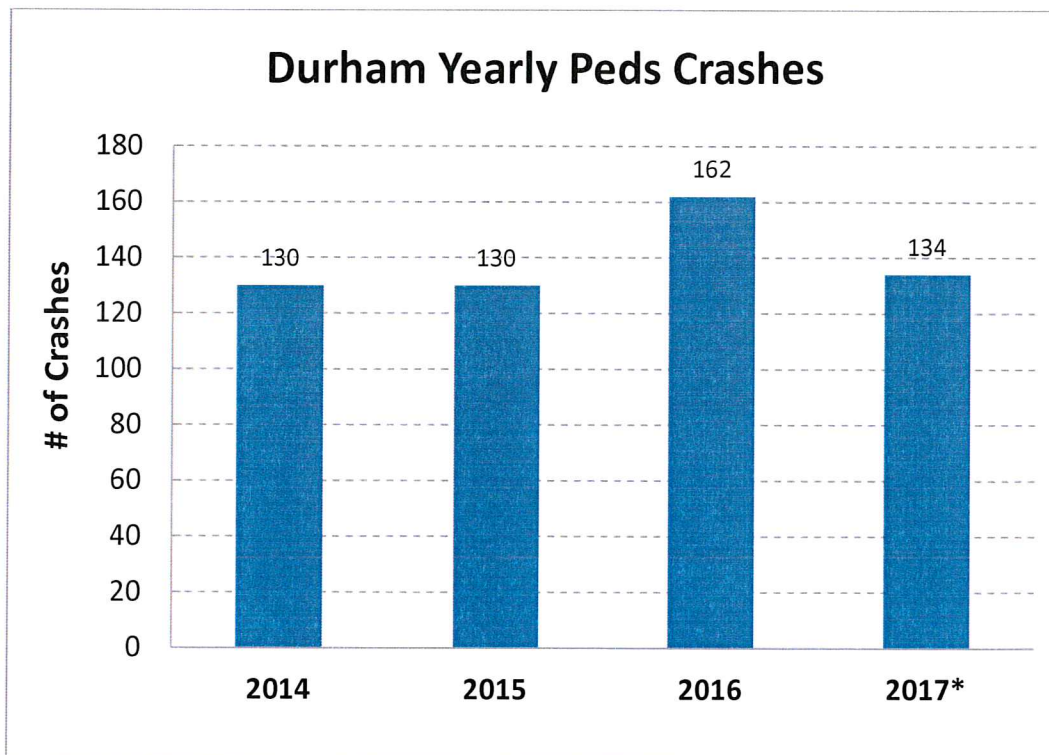
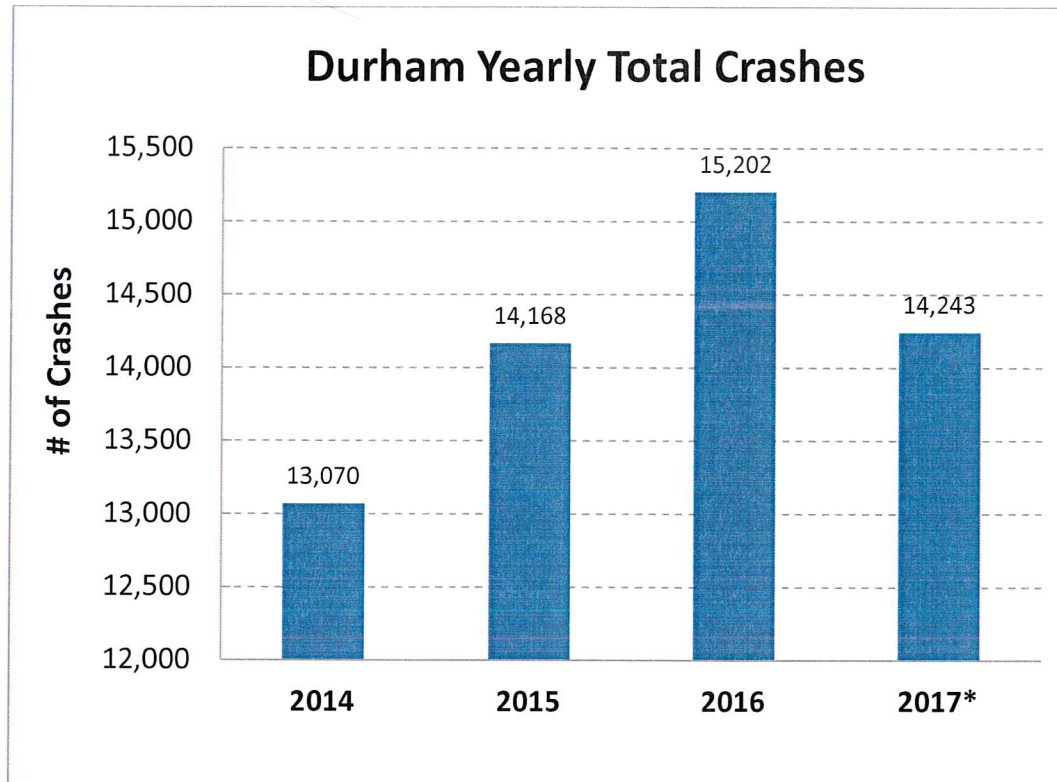


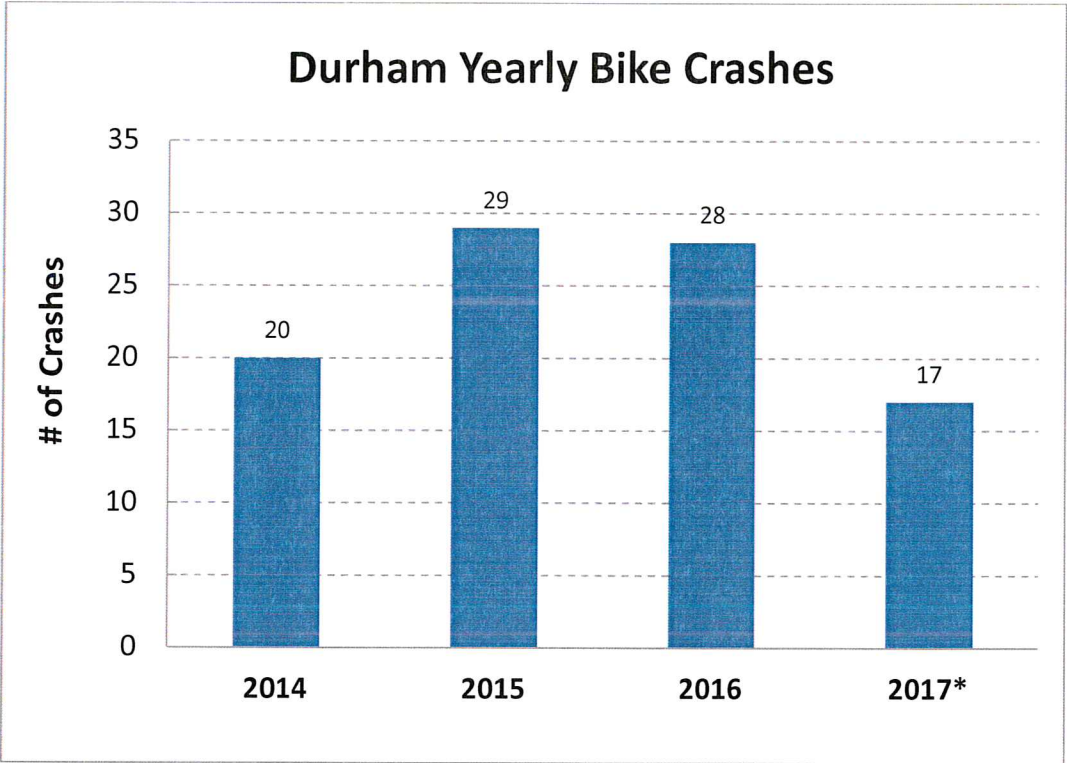
DCHC MPO Yearly Bike Crashes



DCHC MPO Yearly Bike Fatalities







Safety Performance Measures Target Setting Crash Data | **DCHC MPO**

Safety Performance Measures

Year	Fatalities	Fatality Rate	Serious Injures	Serious Injury Rate	Non-motorized Fatalities and Serious Injuries
2008	33	0.724	98	2.150	28
2009	28	0.608	66	1.432	10
2010	30	0.628	57	1.194	13
2011	26	0.542	70	1.459	15
2012	32	0.669	81	1.692	26
2013	40	0.796	80	1.593	24
2014	34	0.644	87	1.648	15
2015	34	0.645	84	1.592	21
2016	32	0.580	64	1.159	18

Target Setting Crash Data

Year	Fatalities (5 Year Average)	Fatality Rate (5 Year Average)	Serious Injures (5 Year Average)	Serious Injury Rate (5 Year Average)	Non-motorized Fatalities and Serious Injuries (5 Year Average)
2008 - 2012	29.8	0.634	74.4	1.586	18.4
2009 - 2013	31.2	0.649	70.8	1.474	17.6
2010 - 2014	32.4	0.656	75.0	1.517	18.6
2011 - 2015	33.2	0.659	80.4	1.597	20.2
2012 - 2016	34.4	0.667	79.2	1.537	20.8
2018 Target*	30.7	0.601	70.6	1.384	18.4

*Target based on State's methodology of reducing crashes by 50% by the year 2030

Rates are in units of crashes per 100 MVT

Last update: 12/21/17

Safety Performance Measures Target Setting Crash Data | Durham - Chapel Hill - Carrboro MPO

Total Reported Crashes

Year	Total Crashes	Injury Crashes	A Injury Crashes	B Injury Crashes	C Injury Crashes	PDO Crashes	Fatalities	A Injuries	B Injuries	C Injuries
2008	11,275	33	79	753	1,908	8,502	33	98	961	2,998
2009	11,026	25	54	719	1,853	8,375	28	66	924	2,912
2010	10,790	29	51	707	1,739	8,264	30	57	908	2,777
2011	11,458	23	59	697	1,865	8,814	26	70	886	3,005
2012	11,885	31	63	721	2,102	8,968	32	81	914	3,237
2013	12,328	37	64	728	2,062	9,437	40	80	949	3,267
2014	12,265	30	70	714	2,055	9,396	34	87	932	3,213
2015	13,553	32	72	767	2,394	10,288	34	84	963	3,821
2016	14,716	32	58	887	2,476	11,263	32	64	1,135	3,936

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