# **NE 47th Avenue/NE 78th Street Intersection Clark County**



#### **Project Goals:**

- Reconstruct urban intersection to correct skewed alignment
- Install a new traffic signal and reconfigure roadway striping
- Improve access to Clark County's Operations Center

### **Project Outcomes:**

- Reduced collisions with the elimination of the skewed "off-set" intersection
- Positive train, vehicle and pedestrian management at the intersection
- Enhanced safety for vehicles entering and leaving the Public Works Operations Center and all users crossing thru the intersection.

## **Project Information**

Federal Funding Program: STP Program

RTC Awarded Funding: \$1,000,000

Total Project Cost: \$2,650,000

**Project Type: Road Improvement** 

**Project Length: 0.02 miles** 

**Function Classification: Principal Arterial** 

Daily Traffic Volume: 19,000 ADT

### **Project Description**

The NE 47th Avenue / NE 78th Street Intersection project reconstructed a skewed alignment intersection, installed a new traffic signal, reconfigured the roadway striping, upgraded the existing railroad crossing, improved access and safety into Clark County's Operations Center and the travelling public.

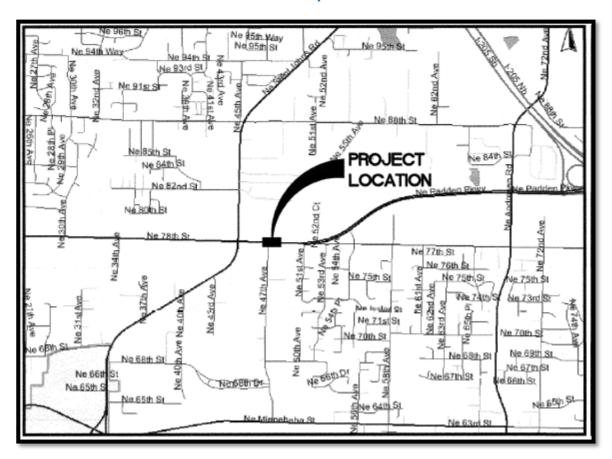
## **Project Funding**

Phase	Year	Federal Funds	Other	Total
PE	2013	\$0	\$282,000	\$282,000
ROW	N/A	\$0	\$1,000	\$1,000
CN	2015	\$1,000,000	\$1,368,000	\$2,368,000
Total		\$1,000,000	\$1,650,000	\$2,650,000

#### **Project Outcome Details**

- The realigned intersection meets driver expectancy.
- The addition of a traffic signal, upgraded railroad crossing and associated devices provide enhanced safety benefits for the travelling public.
- Improved accessibility to the Clark County Operations Center and NE 47th Avenue.
- The opportunity for collisions has been reduced and safety enhanced with: the improvement of sight distance, the realignment of the skewed/off-set to a typical four-legged intersection and the construction of the signal system.

#### Map



Goal: Reduce reported crashes per year

**Outcome:** There was a reduction in reported crashes at the intersection of NE 47<sup>th</sup> Avenue/NE 78<sup>th</sup> Street. The crash analysis looked the reported crashes before and after the project was constructed for the crash analysis, including the following:

- Before: from January 2011 through December 2015
- After: from June 2016 to December 2018

As shown in Figure 1, before the project there were two reported crashes per year, and after the project there was only one reported crash per year. In addition, the collisions that have occurred after the project only resulted in property damage, and no injuries. However, before the project, the collisions resulted in an injury approximately 40% of the time.

The time period from January 2016 to June 2016 was removed from the analysis to account for construction work

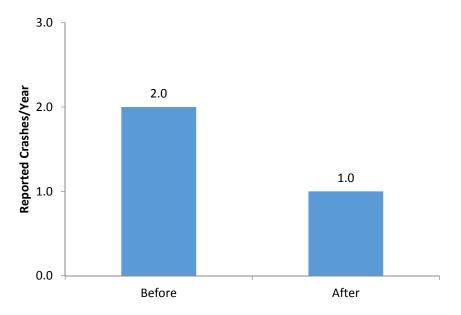


Figure 1. NE 47<sup>th</sup> Avenue/NE 78<sup>th</sup> Street Intersection Crashes Before and After

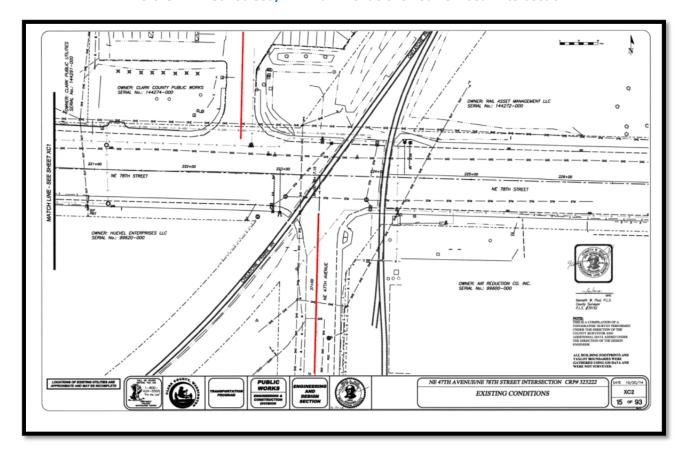
#### Before - No Signal at NE 78th Street / NE 47th Avenue



After – Signal at NE 78th Street / NE 47th Avenue



Before - NE 78th Street / NE 47th Avenue Skewed "Off-set" Intersection



After - NE 78th Street / NE 47th Avenue Skewed "Off-set" Intersection

