



LEWIS-CLARK VALLEY MPO

Public ADA Facilities Inventory

Final Report 2014 Addendum

*Supplemental ADA
Transition Plan Inventory of
Public ROW Facilities*

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Table of Contents

Executive Summary	1
Introduction	2
Inventory Methodology	2
Inventory Plan	2
Needs Assessment and Training Materials	3
Field Inventory	3
Quality Control of Inventory Data.....	3
Compiled GIS Dataset	4
Summary of Inventory Findings	4
Curb Ramps.....	5
Sidewalk	8
Appendix A - Inventory Data Maps	12

Executive Summary

In 2012, the Lewis-Clark Valley Metropolitan Planning Organization (LCVMPO) initiated the Public ADA Facilities Inventory to identify mobility barriers within the public rights-of-way throughout the MPO boundary. At that time, budget constraints prevented the completion of the field inventory in the City of Lewiston. This addendum to the LCVMPO Public ADA Facilities Inventory Final Report covers the additional inventory work completed during the Supplemental ADA Transition Plan Inventory of Public ROW Facilities project in 2014. The inventoried data will be used to create an ADA Transition Plan that identifies how ADA compliance will be achieved.

The scope of work for the Supplemental ADA Transition Plan Inventory of Public ROW Facilities project consisted of a field inventory of sidewalks and curb ramps in the City of Lewiston and an update to the existing GIS dataset of pedestrian facilities in the public right-of-way.

Field Inventory Methodology

The supplemental inventory project used the same methodology as the initial project, including the needs assessment (data dictionary), training materials, and post processing and quality control processes. This provided for seamless integration into the existing GIS dataset and consistent data between the two inventory projects.

Field Inventory Results

The inventory began June 2014 and was completed July 2014. Curb ramps, sidewalks, and locations in need of sidewalk or curb ramps were measured and inventoried. These features and other physical obstacles that may limit accessibility were documented using GPS units. During the inventory process, 1,541 curb ramp locations and 1,457 sidewalk segments were collected. For the purpose of this project, a curb ramp location is a point where there is an existing curb ramp or there is a need for a curb ramp. A sidewalk segment is a section of existing sidewalk or a section where sidewalk is needed in order to provide a complete pedestrian access route. A segment is no longer than a block and terminates where the sidewalk intersects a roadway or the sidewalk characteristics, such as width, material or condition, change. The inventory data was post processed, checked for quality and analyzed for compliance with ADA requirements.

Of the 1,541 curb ramp locations inventoried in the City of Lewiston in 2014, there were 1,326 locations that did not have a curb ramp, and 215 locations that were noncompliant. The most common compliance issues for curb ramps were steep landing slope, noncompliant or missing detectable warning, and half inch or greater lip present at the transition from the ramp to the street.

Of the 1,457 sidewalk segments inventoried in 2014, there were 888 locations that did not have sidewalk or a pedestrian pathway, 440 locations that were noncompliant, and 129 locations that were compliant. The most common compliance issues for sidewalk segments were steep cross slope, surface discontinuities present, and obstructions that narrow the width of the pedestrian path.

Introduction

In compliance with the Americans with Disabilities Act (ADA), the LCVMPPO, which manages transportation planning for Lewiston, Clarkston, Asotin and urbanized areas of Nez Perce and Asotin Counties, conducted an inventory of pedestrian facilities within the public right-of-way for compliance with ADA in 2012. At that time, budget constraints prevented the completion of the field inventory in the City of Lewiston. When additional funding became available to continue the inventory work in the City of Lewiston, the MPO contracted with H.W. Lochner to continue to identify, measure, and catalog pedestrian facilities within the city to determine compliance with ADA requirements.

The data collected during the Supplemental ADA Transition Plan Inventory of Public ROW Facilities project will be used to create an ADA Transition Plan that identifies which facilities are in need of reconstruction or replacement to remove barriers to accessibility and how ADA compliance will be achieved.

Inventory Methodology

The scope of work for the supplemental inventory project included the following (see below for details):

- Inventory Plan
- Needs assessment and training materials
- Field inventory
- Quality control of inventory data
- Updated GIS database

Inventory Plan

Developing an inventory plan prior to field work is essential to the success of any ADA inventory project. Much of this was completed with the LCVMPPO Public ADA Facilities Inventory in 2012, including determining what feature characteristics would be recorded and how measurements were to be taken.

For the supplemental inventory project, the City of Lewiston provided a map of first priority routes to be inventoried. The plan assigned those routes in a logical, efficient order to ensure that as much data as possible could be collected within the project schedule and budget. Once those routes were completed, existing data was reviewed and additional areas of importance were identified by the city and inventoried. The inventory plan helped maintain consistency with the previous project, reduced duplication of efforts, and reduced the need for future field visits.

Needs Assessment and Training Materials

The supplemental inventory project used the same needs assessment, or data dictionary, and training materials that were developed during the initial project.

The needs assessment was developed for the handheld GPS units and provided a streamlined form to assess pedestrian facilities for potential ADA compliance issues. Using the same needs assessment form allowed for easier integration of the new data into the existing GIS dataset.

Both members of the inventory team thoroughly reviewed the inventory manual prior to beginning the supplemental inventory work. In addition, one of the interns working on the supplemental inventory project also worked on the initial project. The returning intern had completed the training course for the LCVMPPO Public ADA Facilities Inventory and had experience with ADA requirements for the public right-of-way, how to measure all components of a ramp that pertain to compliance, and the correct operation of the inventory equipment and GPS units. This experience allowed him to provide hands-on training in the field to the new intern and helped maintain consistency in the data collection process between the two projects.

Field Inventory

The inventory began June 2014 and was completed July 2014. This was conducted according to the inventory plan and priorities. Curb ramps, sidewalks, and locations in need of sidewalk or curb ramps were measured and inventoried. Noncompliant driveways were noted as obstructions in the sidewalk during the inventory. These features and other physical obstacles that may limit accessibility were documented using the needs assessment form created for the initial inventory project on the GPS units.

During the inventory process, the inventory team downloaded the collected data and provided weekly progress reports to the project manager. When questions arose in the field, issues were resolved quickly via phone or text message.

Once the data was collected, it was downloaded and differential correction was completed using GPS Pathfinder Office. The raw files were exported to shape files and merged into one dataset using ArcGIS 10.0. Photos taken during inventory were compiled and linked to the final shape files.

Maps of the final inventory data are located in Appendix A.

Quality Control of Inventory Data

Once the field data was processed, a thorough in-office quality control review was completed to identify missing or incorrect data to ensure that locations were correct to the greatest extent possible.

Compiled GIS Dataset

Lochner compiled the inventory data into GIS format and incorporated the new data into the existing GIS database. The following updated GIS shape files were provided to LCVMP and the City of Lewiston:

- One updated set of curb ramp shape files for the City of Lewiston.
- One updated set of sidewalk shape files for the City of Lewiston.

Maps were also updated showing all inventoried curb ramp locations, sidewalks, and transit stops within the Idaho portion of the MPO.

Summary of Inventory Findings

A large amount of data was collected during the Public ADA Facilities Inventory and Supplemental ADA Transition Plan Inventory of Public ROW Facilities projects. Table 1 indicates how many curb ramps and sidewalk segments were inventoried in the City of Lewiston during both projects.

Table 1. Number of Locations Inventoried in the City of Lewiston

Project Year	Curb Ramps	Sidewalk Segments
2014	1541	1457
2012	2113	1598
Total	3654	3055

Table 2 indicates the total number of curb ramps, sidewalk segments and transit stop locations were inventoried for each member agency within the MPO.

Table 2. Updated Number of Locations Inventoried by Agency

Agency	Curb Ramps	Sidewalk Segments	Transit Stops
Asotin City	187	139	2
Asotin County	301	212	4
Clarkston	954	923	24
Lewiston	3654	3055	27
Total	5096	4329	57

Once the new GIS datasets were compiled for curb ramps and sidewalk segments, the data was analyzed for compliance with the ADA requirements. Each of the components in Table 3 and Table 6 was reviewed. Overall, compliance with requirements was low, especially in older areas that were built before the current ADA standards. A higher percentage of locations without curb ramps or sidewalks were inventoried during the supplemental inventory project. This is likely due to the fact that many of the pedestrian routes inventoried in 2014 are a lower priority and less routinely used than the routes inventoried in 2012 and have more gaps in the pedestrian access route.

Curb Ramps

Curb ramp components related to ADA compliance were measured and examined during the field inventory. Compliance determinations were made in the field, using the technical requirements listed in the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (July 26, 2011). Table 3 indicates the components of a curb ramp that were measured during the inventory.

Table 3. Curb Ramp Components Measured During Inventory for Compliance Evaluation

Component		ADA Requirement
Ramp		
	Ramp Width	48 inches minimum
	Running Slope	8.3% maximum
	Cross Slope	2.0% maximum with exception from R302.6.1
	Flare Slope A	10.0% maximum if in pedestrian path
	Flare Slope B	10.0% maximum if in pedestrian path
	Discontinuities	No discontinuities greater than half an inch vertical or horizontal. Vertical surface discontinuities between 0.25 in and 0.5 in shall be beveled with a slope not steeper than 50%.
Landing		
	Landing Size	4.0 ft. by 4.0 ft. minimum
	Maximum Slope	2.0% maximum
Detectable Warning/Truncated Domes		
	Depth	24 inches minimum in the direction of travel
	Width	Must extend the full width of the curb cut
	Distance to Curb Line	Within 8 inches of the curb line
	Color Contrast	Contrast visually with surrounding area
	Dome Dimensions	Base diameter of 0.9 in. minimum to 1.4 in. maximum; top diameter of 50% of base diameter minimum to 65% of base diameter maximum; height of 0.2 in; center to center spacing 1.6 in. minimum to 2.4 in. maximum; base to base spacing of 0.65 in. minimum.
Transition		
	Lip	No surface discontinuities
	Gutter Counter Slope	5.0% maximum
	Gutter Flowline Slope	2.0% maximum
	Clear Space	4.0 ft. by 4.0 ft. minimum clear space within crosswalk
Pedestrian Signal Pushbutton		
	Height	Pushbutton height within 15 to 48 inches of landing surface
	Distance from Landing	Pushbutton within 10 horizontal inches of landing
Median or Island		
	Island Compliance	Island Compliant with Section R305.4

Curb Ramp Summary

Of the 1,541 curb ramp locations inventoried throughout the City of Lewiston in 2014, there were 1,326 locations that did not have a curb ramp, 215 locations that were noncompliant and zero locations that were compliant with all ADA requirements reviewed.

The distribution for curb ramp compliance in the City of Lewiston is shown in Figure 1.

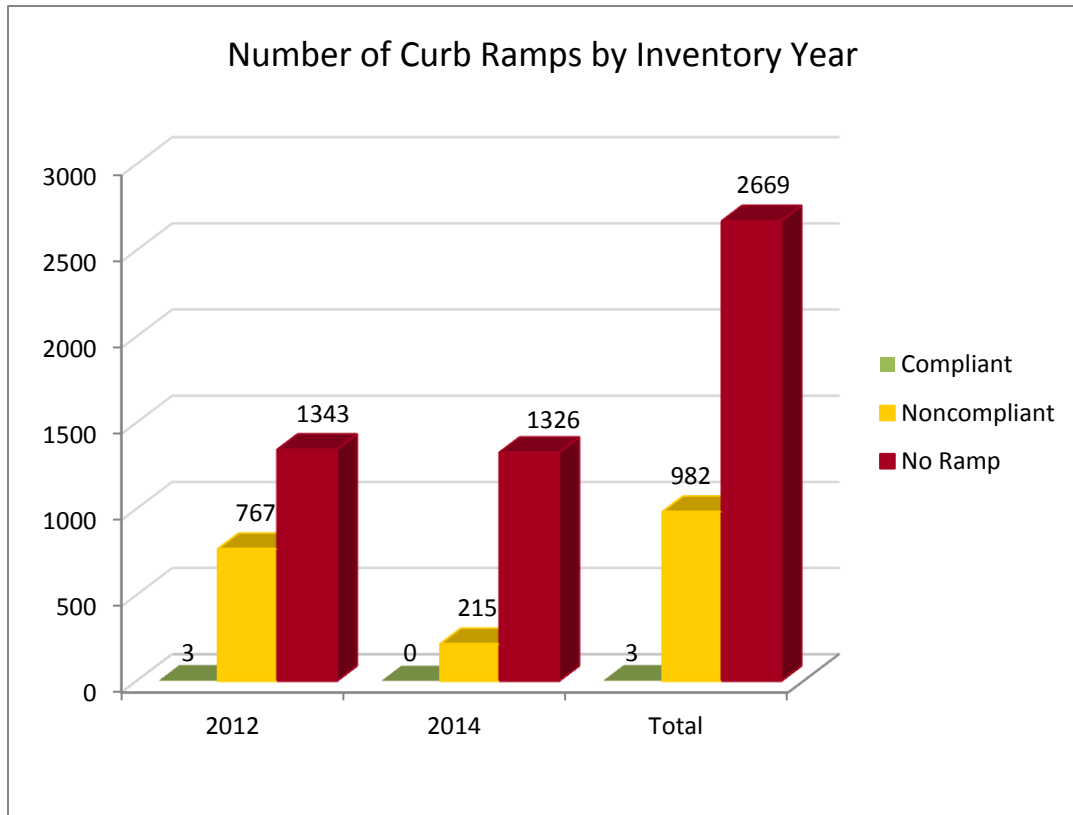


Figure 1. Number of Curb Ramps in the City of Lewiston by Inventory Year

From 2012 to 2014, a total of 3,654 curb ramps were inventoried in the City of Lewiston. Of those, there were 2,669 locations that did not have a curb ramp, 982 locations that were noncompliant and 3 locations that were compliant with all ADA requirements reviewed.

The updated distribution for curb ramp compliance among the member agencies is shown in Figure 2.

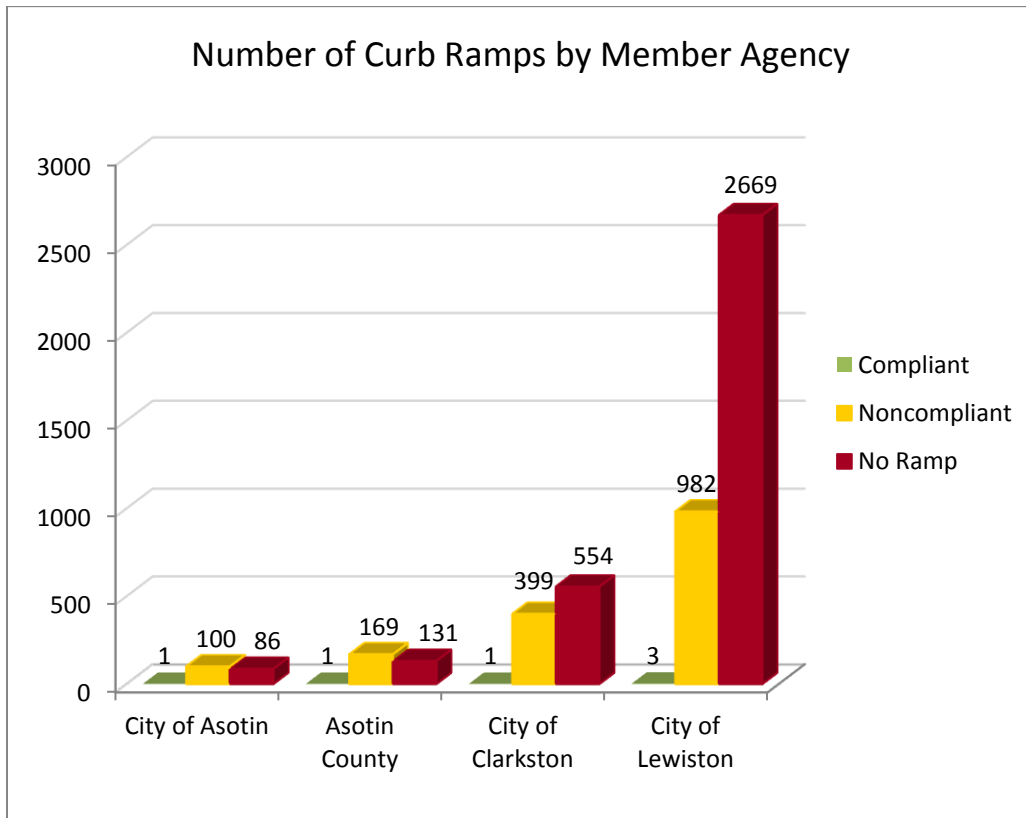


Figure 2. Updated Number of Curb Ramps by Member Agency

Locations that had a curb ramp were reviewed to determine what components appeared to have the most compliance issues. The most common compliance issues for curb ramps inventoried in 2014 were steep landing slope, noncompliant or missing detectable warning, and half inch or greater lip present at the transition from the ramp to the street.

Table 4 indicates the number of curb ramps with the most common deficiencies in the City of Lewiston.

Table 4. Common Noncompliant Curb Ramp Components in the City of Lewiston

	Noncompliant Curb Ramp Component						
	Running Slope	Cross Slope	Landing Size	Landing Slope	Detectable Warning	Half Inch Lip Present	Flowline Slope
2012	471	504	371	649	700	453	392
	61.2%	65.5%	48.2%	84.3%	90.9%	58.8%	50.9%
2014	125	141	147	189	189	184	119
	58.1%	65.6%	68.4%	87.9%	87.9%	85.6%	55.3%
City of Lewiston Total	596	645	518	838	889	637	511
	60.5%	65.5%	52.6%	85.1%	90.3%	64.7%	51.9%

Most common compliance issues varied slightly between member agencies, but the most common problems for curb ramps within the LCVMPPO include:

- Steep running slope
- Steep cross slope
- Insufficient landing size
- Steep landing slope
- Noncompliant or missing detectable warning
- Half inch or greater lip present at the transition from the ramp to the street
- Steep flowline slope

Table 5 indicates the updated number of curb ramps with the deficiencies listed above for each member agency within the MPO. It also shows the percentage of curb ramps with the deficiency.

Table 5. Updated Common Noncompliant Curb Ramp Components in the LCVMPPO

	Noncompliant Curb Ramp Component						
	Running Slope	Cross Slope	Landing Size	Landing Slope	Detectable Warning	Half Inch Lip Present	Flowline Slope
City of Asotin	55	76	55	75	90	77	72
	54.5%	75.2%	54.5%	74.3%	89.1%	76.2%	71.3%
Asotin County	99	108	118	146	153	76	86
	58.2%	63.5%	69.4%	85.9%	90.0%	44.7%	50.6%
City of Clarkston	288	256	289	343	309	252	167
	72.0%	64.0%	72.3%	85.8%	77.3%	63.0%	41.8%
City of Lewiston	596	645	518	838	889	637	511
	60.5%	65.5%	52.6%	85.1%	90.3%	64.7%	51.9%
LCVMPPO Total	1038	1085	980	1402	1441	1042	836
	62.7%	65.5%	59.2%	84.7%	87.0%	62.9%	50.5%

Sidewalk

Sidewalk components related to ADA compliance were measured and examined during the field inventory. Determinations were made in the field on which components were compliant or noncompliant, using the technical requirements listed in the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way. Noncompliant driveways within sidewalk segments were noted as obstructions during the inventory.

Table 6 indicates the sidewalk components that were measured during the inventory.

Table 6. Sidewalk Components Measured During Inventory for Compliance Evaluation

Component		ADA Requirement
Sidewalk		
Sidewalk Width		48 inches minimum
Grade		Not to exceed the grade of the adjacent road
Cross Slope		2.0% maximum with exception from R302.6.1
Discontinuities		No discontinuities greater than half an inch vertical or horizontal. Vertical surface discontinuities between 0.25 in and 0.5 in shall be beveled with a slope not steeper than 50%.
Obstructions		No objects, including but not limited to poles, signs, vegetation, street furniture and driveways that restrict to width or compliant walking space to less than 48 inches
Surface		Must be stable, firm, and slip resistant

Sidewalk Summary

Of the 1,457 sidewalk segments inventoried throughout the City of Lewiston in 2014, there were 888 locations that did not have sidewalk or a pedestrian pathway, 440 locations that were noncompliant and 129 locations that were compliant with all ADA requirements reviewed.

The distribution for sidewalk compliance in the City of Lewiston is shown in Figure 3.

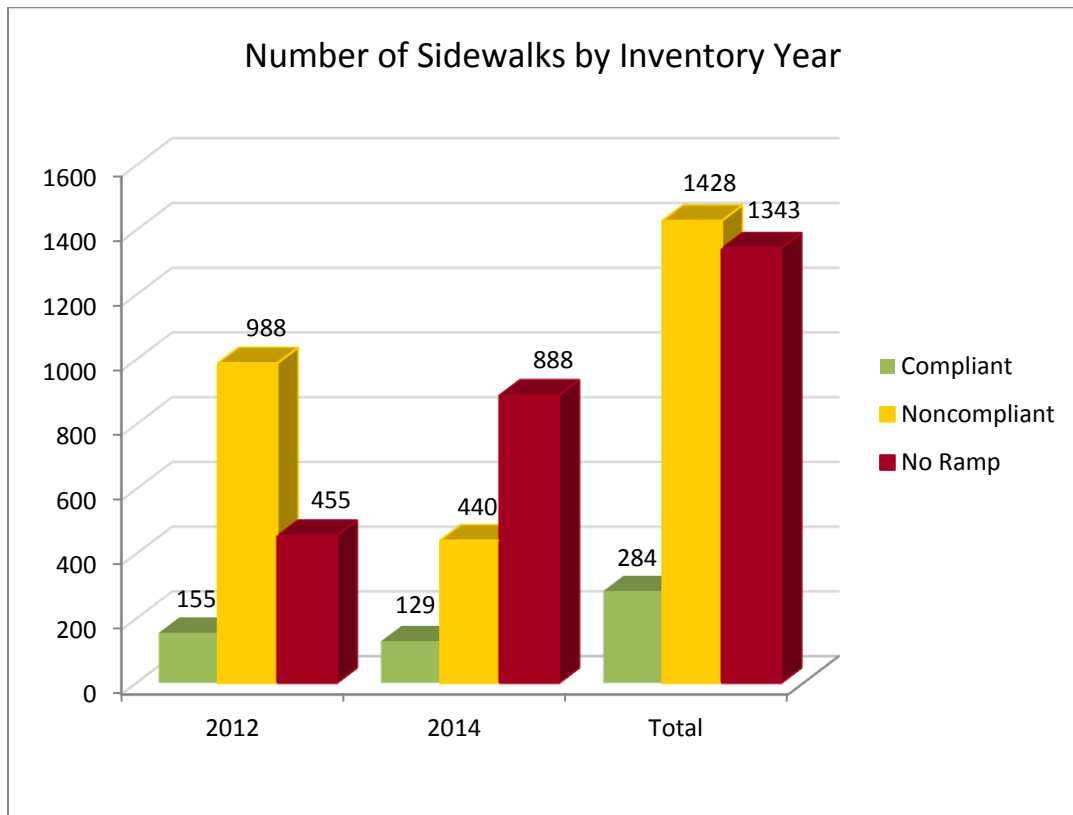


Figure 3. Number of Sidewalks in the City of Lewiston by Inventory Year

From 2012 to 2014, a total of 3,055 sidewalk segments were inventoried in the City of Lewiston. Of those, there were 1,343 locations that did not have sidewalk, 1,428 locations that were noncompliant and 284 locations that were compliant with all ADA requirements reviewed.

The updated distribution for sidewalk compliance among the member agencies is shown in Figure 4.

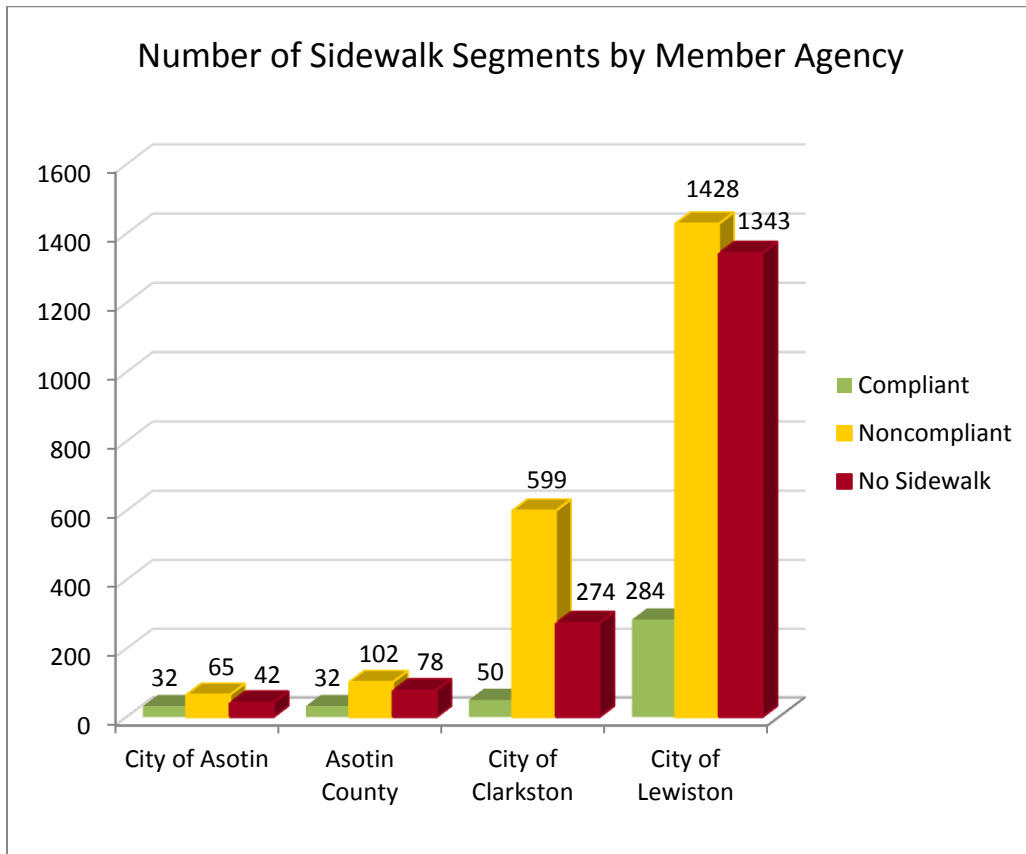


Figure 4. Updated Number of Sidewalk Segments by Member Agency

Locations that had sidewalk were reviewed to determine what components appeared to have the most compliance issues. The most common compliance issues for sidewalk segments inventoried in 2014 were steep cross slope, surface discontinuities present, and obstructions that narrow the width of the pedestrian path.

Table 7 indicates the number of sidewalk segments with the most common deficiencies in the City of Lewiston.

Table 7. Common Noncompliant Sidewalk Components in the City of Lewiston

	Sidewalk			Discontinuities	Obstructions
	Width	Cross Slope	Grade	Present	Present
2012	33	598	63	819	731
	2.9%	52.3%	5.5%	71.7%	64.0%
2014	26	317	13	213	361
	4.6%	55.7%	2.3%	37.4%	63.4%
City of Lewiston Total	59	915	76	1032	1092
	3.4%	53.4%	4.4%	60.3%	63.8%

Locations that had a sidewalk or a pedestrian path were reviewed to determine what components appeared to have the most compliance issues. The most common problems for sidewalk segments within the LCVMPPO include:

- Narrow sidewalk width
- Steep cross slope
- Steep grade
- Surface discontinuities present
- Obstructions that narrow the width of the pedestrian path

Table 8 indicates the updated number of sidewalk segments with the deficiencies listed above for each member agency. It also shows the percentage of sidewalk segments with the deficiency.

Table 8. Updated Common Noncompliant Sidewalk Components in the LCVMPPO

	Noncompliant Sidewalk Component				
	Sidewalk Width	Cross Slope	Grade	Discontinuities Present	Obstructions Present
City of Asotin	8	29	10	44	45
	8.2%	29.9%	10.3%	45.4%	46.4%
Asotin County	1	86	8	58	82
	0.7%	64.2%	6.0%	43.3%	61.2%
City of Clarkston	38	471	27	487	528
	5.9%	72.6%	4.2%	75.0%	81.4%
City of Lewiston	59	915	76	1032	1092
	3.4%	53.4%	4.4%	60.3%	63.8%
LCVMPPO Total	106	1501	121	1621	1747
	4.1%	57.9%	4.7%	62.5%	67.4%

Appendix A - Inventory Data Maps

Appendix A includes maps of the final inventory data for the City of Lewiston collected in 2012 and 2014.