

# TECHNICAL ADVISORY COMMITTEE (TAC) REGULAR MEETING AGENDA

Sierra Vista Metropolitan Planning Organization Technical Advisory Committee (TAC) Regular Meeting Thursday, December 3, 2015

1:30 PM

Web: www.SVMPO.org

Email: SVMPO@SierraVistaAZ.gov

Public Works, Pete Castro Center Main Conference Room 401 Giulio Cesare Avenue Sierra Vista, AZ 85635

# **SVMPO TAC MEMBERS:**

(One or more members may participate via teleconference)

Chair Karen Riggs, Highway & Floodplain Director, Cochise County

Designated Alternate: Karen Lamberton, Transportation

Planner, Cochise County

Vice-Chair Sharon Flissar, Director Public Works, City of Sierra Vista Member Matt McLachlan, Director Community Development, City of

Sierra Vista

Member (VACANT), Member, City of Sierra Vista

Member Mark Hoffman, Arizona Department of Transportation

**STAFF:** 

SVMPO Administrator Dan Coxworth

## 1. CALL TO ORDER AND ROLL CALL

# 2. CALL TO THE PUBLIC

Although not required, please let the Chair know before the meeting begins if you wish to speak during the Call to the Public about anything that is NOT on the agenda.

# 3. ACCEPTANCE OF THE AGENDA

# 4. ACCEPTANCE OF MEETING MINUTES (ATTACHED)

TAC Regular Meeting of July 8, 2015 TAC Regular Meeting of August 27, 2015

# 5. ANNOUCEMENTS AND UPDATES

Announcements and/or updates may be provided by TAC Members, SVMPO Administrator or other invitees.

# PRESENTATION / DISCUSSION / POSSIBLE ACTION

# 6. DISCUSSION: LONG RANGE TRANSPORTATION PLAN – Financial Implementation Chapter (Link)

Dan Coxworth

Summary: Review and discussion of the draft Financial Implementation Chapter of the Long Range Transportation Plan. Link to the draft chapter: <a href="http://www.svmpo.org/wp-content/uploads/2015/11/Chapter6\_FinancialPlan.pdf">http://www.svmpo.org/wp-content/uploads/2015/11/Chapter6\_FinancialPlan.pdf</a>

2040 Regional Transportation Plan Project Page: <a href="http://www.svmpo.org/rtp2040/">http://www.svmpo.org/rtp2040/</a>

# 7. DISCUSSION: Sidewalk Implementation Plan (Attached)

Dan Coxworth

Summary: Sidewalk implementation plan with sidewalk inventory and pedestrian gap analysis with recommended sidewalk improvement project maps and list.

8. FUTURE AGENDA ITEMS

TAC

# 9. UPCOMING SCHEDULED MEETINGS

- > SVMPO Board Meeting January 21, 2015, 3:30 p.m., City Hall
- > SVMPO TAC Meeting TBD

# 10. ADJOURNMENT OF REGULAR MEETING

Email: <u>SVMPO@SierraVistaAZ.gov</u> Web: <u>www.SVMPO.org</u>



# TECHNICAL ADVISORY COMMITTEE (TAC) REGULAR MEETING MINUTES

Sierra Vista Metropolitan Planning Organization Technical Advisory Committee (TAC) Regular Meeting Wednesday, July 8, 2015

8:30 AM

Web: www.SVMPO.org

Email: SVMPO@SierraVistaAZ.gov

Public Works, Pete Castro Center Main Conference Room 401 Giulio Cesare Avenue Sierra Vista, AZ 85635

# **SVMPO TAC MEMBERS:**

Chair Karen Riggs, Highway & Floodplain Director, Cochise County

Vice-Chair Sharon Flissar, City Engineer, City of Sierra Vista

Member Scott Dooley, Public Works Director, City of Sierra Vista
Member (VACANT), Director Community Development, City of Sierra

Vista

Member Mark Hoffman, Arizona Department of Transportation

(Via teleconference)

**STAFF:** 

Designated Alternate: Karen Lamberton, Transportation Planner, Cochise County

SVMPO Administrator Dan Coxworth

Minutes Helen Lee, Administrative Secretary, City of Sierra Vista

Jason Hafner, Arizona Department of Transportation Drew Spear, Dibble Engineering (via teleconference) Kevin Perko, Dibble Engineering (via teleconference)

ALSO PRESENT:

Mayor Rick Mueller, SVMPO Board of Directors Chair

Bruce Piepho, Citizen Tricia Gerodette, Citizen Patsy Molinari, Citizen Chris G. Braswell, Citizen

Greg Cameron

#### 1. CALL TO ORDER AND ROLL CALL

Vice Chair Flissar called the meeting to order at 8:37 a.m. SVMPO Administrator Coxworth conducted the roll call.

#### 2. CALL TO THE PUBLIC

Bruce Piepho, Citizen, submitted an analysis rebuttal (see attachment) for the SVMPO to use at its discretion, and includes questions posed by the public.

Tricia Gerodette, Citizen, asked about three reports included on the SVMPO website and how they will be addressed in future agendas.

Chris G. Braswell, Citizen, asked for the SVMPO TAC to make sure the organization represents the political will of the constituents, and cautioned overdevelopment and sprawl.

Patsy Molinari, Citizen, submitted a letter (see attachment) and spoke against the Buffalo Soldier Trail DCR methodology and public participation processes.

# 3. ACCEPTANCE OF THE AGENDA

Vice Chair Flissar asked for a motion to accept the agenda of the July 8, 2015 SVMPO TAC Regular Meeting, as written. Chair Riggs so moved and Member Dooley seconded. The motion passed unanimously, 4/0.

# 4. ACCEPTANCE OF MEETING MINUTES (ATTACHED)

TAC Regular Meeting of June 11, 2015

Vice Chair Flissar asked for a motion to accept the Minutes of the June 11, 2015 Regular Meeting of the SVMPO TAC, as amended. Chair Riggs so moved and Member Dooley seconded.

The following revisions were requested:

- Page 4
  - o 4<sup>th</sup> paragraph remove redundant period at end.
  - o Item 8, 2<sup>nd</sup> paragraph, first line change "March 27rd" to "March 2016"
- Page 5
  - o 2<sup>nd</sup> paragraph, 1<sup>st</sup> line change "creator" to spreadsheet.
  - o 5<sup>th</sup> paragraph change "go bad" to "lacked sufficient capacity"
  - o 9<sup>th</sup> paragraph change "she develops for the County" to "she develops the cost estimates for the County"
  - o 10<sup>th</sup> paragraph, 1<sup>st</sup> line omit cost "per square mile"
  - o 11<sup>th</sup> paragraph, 2<sup>nd</sup> line replace "the" with "Sierra Vista"

Email: <u>SVMPO@SierraVistaAZ.gov</u> Web: www.SVMPO.org o 12<sup>th</sup> paragraph – change "eight required planning factors" to "eight federal required planning factors"

The motion carried unanimously, 4/0.

# 5. ANNOUCEMENTS AND UPDATES

Jason Hafner, ADOT LPA Section, stated that he was assigned to help the SVMPO initiate projects and will be available to help answer questions and get feedback. He has been assigned to help with organizations in southern Arizona.

Mr. Coxworth participated in a webinar presented by ADOT for roads that have lane departure accidents. ADOT allows funding for HSIP for rumble strips edge lines, etc. His research did not show any roads within the MPO area that qualified; ADOT requires 20 lane departures over 5 years in the Accident Data. The TAC discussed the possibility of collaborating with the police Department to see if additional data from police reports could supplement the Accident Data by ADOT and asking for a 30-day extension. Jason Hafner agreed to follow up with ADOT. Mr. Coxworth announced that the Fry Boulevard Corridor Study went out on July 1st and should be back July 31st.

# PRESENTATION / DISCUSSION / ACTION

# 6. DISCUSSION / ACTION: BUFFALO SOLDIER TRAIL, DESIGN CONCEPT REPORT TAC

Mr. Coxworth explained that all members of the TAC and the Board have had time to review the BST DCR. If the TAC decides to recommend the DCR, it will go before the Board at their meeting on July  $22^{nd}$ .

Drew Spear, Dibble Engineering, gave a brief overview of the project and timeline. An analysis of traffic patterns for Moson Road showed heavy northbound traffic headed towards Highway 90 and heavy traffic southbound in the evening.

Several alternates for connecting Buffalo Soldier Trail to Moson Rd. were presented and analyzed for feasibility. Those alternates were evaluated for utilities, wells in the area and existing home sites, and keeping the Tribute specific plan. The 3 northernmost alternatives were removed from consideration due the existence of power lines and many home sites. At the direction of the MPO and study team, alternates farther south were targeted and analyzed in detail to minimize the impact to existing homes. Those alternates were Lower Ranch Road, Connor Road and Durango Road.

The first public meeting presented alternatives to the public for participation and to determine criteria for their scoring system. During that meeting, the public was generally supportive of routes away from the homes and not disrupting the quality of life.

Dibble then looked at state land and worked with ADOT for multimodal planning of projected traffic. A scenario in their computer system predicted that the southern alignment was most advantageous. Dibble then addressed all criteria, rated and scored each alternative and presented the scoring at the County Board of Supervisor's meeting and presented to public in April 2015. Alternate D scored the highest. The

:mail: <u>SVMPO@SierraVistaAZ.g</u>i Web: <u>www.SVMPO.org</u> two alternatives on Lower Ranch Road and Connor Road scored reasonably, however, scored lower under environmental criteria because both would cross a wash and require a bridge. The meeting showcased differing opinions: many opposed to have an extension, some in favor of the recommendation and others wanting another alternative. Taking everything into account, Dibble presented an implementation plan and interim for two-lane road alternative in lieu of four-lane road and recommended Alternative D, on Durango Road.

ADOT's model predicted 10-12,000 vehicles between State Route 90 through Tribute, which would call for a four-lane road all the way through Tribute and 2 lanes for the ultimate roadway. It's estimated the ultimate road will cost \$13.4 million.

Mr. Hoffman stated that he is still reviewing the DCR, will forward corrections to Mr. Coxworth, and has no comment today.

Ms. Flissar stated her corrections were grammatical, not substantive. She asked for clarification on why no curb or gutter was recommended in the drainage report. Mr. Spear replied that the assumption was that the interim roadway would be rural at first and built to urban standard at the four-lane build out.

Ms. Flissar suggested a closer look at the drainage section as written, with closer consideration for costs. She stated the Garden Canyon Wash cut off by gravel pit that the 100 year flow may not be a given and if downstream infrastructure is built there could be a change in flow. Mr. Spear explained that they didn't plan for downstream flow but sized for the worst case scenario.

Ms. Flissar suggested updating hydrology models for Garden Canyon Wash, expressed concern that Dibble went with FIS numbers, not the City's numbers, which have been getting higher number than FIS. She stated that they do not want to under build either. Mr. Spear explained that Dibble utilized a minimum profile approach. It includes an under pass for cattle and people that would be 7 feet higher than the minimum requirement. Ms. Flissar agreed it was adequate but would like the City's hydrology numbers considered be sure.

Mr. Dooley said he had a number of comments and clarifications to put in writing later today.

Ms. Lamberton stated that the cost estimate assumes the Tribute cost, which is 20 years out. She stated she would have like to see more time framing in the implementation and that she's sees it as more of a 3 to 4 phase process not 2 phase as presented. She acknowledged that the purpose of the DCR was to plan for the alignment but she would have liked to see phasing for extending some of the distance and not going all the way through to Moson Road. Mr. Dooley stated that the scope of this document doesn't go into that much detail and noted that the volume does show an immediate need for an interim road.

In response to Chair Riggs, Mr. Coxworth noted that the DCR was a planning document for a potential road that references findings from a 2003 Small Area Transportation Study. The creation of the MPO allowed funding to become became available to create a document on what has become stalled efforts. The City and the County elected officials will ultimately move the project forward, and this document ends the MPO involvement. The road is of importance to the County and the City, a future alignment may go forward if there are no fatal flaws within the document itself.

In response to Vice Chair Flissar, Mr. Coxworth clarified that the MPO could be involved with funding but only at the direction of the Board, which is made up of County and City officials.

Email: <u>SVMPO@SierraVistaAZ.gov</u> Web: www.SVMPO.org Chair Riggs added that match funding would have to go through the City or the Board of Supervisors to fund the project. The TAC can recommend approval of the DCR and then would be presented to the Board. The Board could approve it or simply acknowledge it without approval. The next step would be design if funded. Mr. Coxworth clarified that an environmental study would be conducted first. Chair Riggs continued that they would need to be careful in the process to make it compatible for federal funding but with avenues available to not federalize the project to keeping efforts local. Mr. Hoffman agreed it would be beneficial to take it as far as possible using the federal dollar.

Chair Riggs stated she would like to see the top three alternates looked at closer going forward instead of focusing on the top alternate, and suggested an environmtal assessment of all three. Mr. Spear replied that such environmental assessment would be more expensive but could be done on the three most feasible alternates.

Mr. Coxworth asked if it was stated that way in the DCR. Mr. Spear replied that it was not and in order to do all three, Dibble would have to do the other two alternates in more detail.

Chair Riggs stated that the Board is meeting on July 22<sup>nd</sup> and asked if the TAC was ready to make a recommendation. Vice Chair Flissar asked if anyone had any substantive comments. Chair Riggs asked if comments are in by Friday, if it gives Dibble enough time to make changes before the Board Meeting. Mr. Coxworth clarified the Board has the same document as the TAC. Chair Riggs clarified that a summary sheet of comments will be provided to the Board from the TAC.

Patsy Molinari, Citizen, expressed concerns the report contains an error of omission as it pertain to the rating of the route, her concerns that the private land owners were not given information and left out of the process. She stated that she is not against connecting BST to Moson, citing concern for the safety of Moson Road and how it could handle any additional traffic.

Tricia Gerodette, Citizen, noted that the summary and public participation choices seemed to only include the January meeting results and should have included a no build option like the 2<sup>nd</sup> meeting. She stated that the meetings did not offer a level playing field of options and the participation was not evenly tallied. Ms. Gerodette agreed that the drainage report should have considered the City's numbers and that the report was funded to help facilitate the Tribute plan.

Bruce Piepho, Citizen, expressed concerns of a 1,800 acre property that attracts traffic to Moson Road, expressed support for a connector route, referenced his previously submitted rebuttal, suggested better surfacing for Moson Road, and asked the TAC to consider public input.

In response to Chair Riggs, Mr. Coxworth announced that the public could send their comments but must be submitted by Friday.

Chair Riggs asked for a motion to move the Buffalo Soldier Trail Design Concept Report as presented by Dibble Engineering with forthcoming suggestions from the Technical Advisory Committee to the Board of Directors. Member Dooley so moved and Vice Chair Flissar seconded. The motion carried unanimously, 4/0.

### 7. FUTURE AGENDA ITEMS

TAC

> Elect a firm for Fry Blvd Study.

Web: www.SVMPO.org

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➤ Representation here on TAC, ongoing change in City structure. DC – By-law amendment for Board for final approval.

# 8. UPCOMING SCHEDULED MEETINGS

- > SVMPO TAC Meeting August 27, 2015, Afternoon time TBD.
- > SVMPO Board Meeting July 22, 2015, 3:30 p.m., City Hall (Dibble will be present to make formal final presentation)

# 9. ADJOURNMENT OF REGULAR MEETING

Chair Riggs asked for a motion to adjourn. Vice Chair Flissar so moved and Member Dooley seconded. The motion passed unanimously, 4/0, at 10:08 a.m.

Chair K	aren Riggs	
SVMPO	Technical Advisory (	Committee
Minutes	prepared by:	
	Lee, Administrative Se	



# TECHNICAL ADVISORY COMMITTEE (TAC) REGULAR MEETING MINUTES

Sierra Vista Metropolitan Planning Organization Technical Advisory Committee (TAC) Regular Meeting

Thursday, August 27, 2015 2:00 PM

Web: www.SVMPO.org

Email: SVMPO@SierraVistaAZ.gov

Public Works, Pete Castro Center Main Conference Room 401 Giulio Cesare Avenue Sierra Vista, AZ 85635

# **SVMPO TAC MEMBERS:**

(One or more members may participate via teleconference)

Chair Karen Riggs, Highway & Floodplain Director, Cochise County

Designated Alternate: Karen Lamberton, Transportation

Planner, Cochise County

Member Matt McLachlan, Director Community Development, City of

Sierra Vista

Member Mark Hoffman, Arizona Department of Transportation (by

teleconference)

**ABSENT** 

Member Sharon Flissar, Director of Public Works, City of Sierra Vista

Member Vacant, City Engineer

**STAFF:** 

SVMPO Administrator Dan Coxworth

Designated alternate: Karen Lamberton, Transportation Planner, Cochise County

**ALSO PRESENT:** 

Joann and Kule Krycls (spelling, sign-in sheet not legible)

Jacqueline O'Connor

Ryan Kooi, Transit Administrator, City of Sierra Vista

Gregory Christakos, Inter, SVMPO

Ed Stilling, Federal Highways Administration

Bruce Piepho Tricia Gerrodette Patsy Molinari Jere Fredenburgh

#### 1. CALL TO ORDER AND ROLL CALL

Chair Riggs called the meeting to order at 2:04 p.m. SVMPO Administrator Coxworth conducted the roll call.

#### 2. CALL TO THE PUBLIC

Bruce Piepho explained he would provide comments to the SVMPO concerning the draft Transit Chapter. Mr. Piepho explained his concerns about the cost of the Sierra Vista Transit system.

Jere Fredenburgh expressed her concerns about the cost of the Vista Transit system and the number of people who use the system.

Patsy Molinari read a statement (attached)

#### 3. ACCEPTANCE OF THE AGENDA

Chair Riggs asked for a motion to accept the agenda of August 27, 2015 SVMPO Regular Meeting, as written. Member McLachlan moved to accept, Chair Riggs seconded. The motion passed unanimously, 3/0.

## 4. ACCEPTANCE OF MEETING MINUTES

Without three members present who at the Aug. 27 who were also present at the July 8 meeting, the TAC decided to push the approval of the regular meeting minutes of July 8, 2015 meeting to the next TAC meeting.

# 5. ANNOUCEMENTS AND UPDATES

Administrator Coxworth explained that with the changes in personnel at the City of Sierra Vista it is necessary to revise the SVMPO By-laws. The By-laws will be reviewed by the SVMPO Board at their next meeting on Sept. 23, 2015 regular meeting.

# PRESENTATION / DISCUSSION / POSSIBLE ACTION

# 6. **DISCUSSION: LONG RANGE TRANSPORTATION PLAN - TRANSIT CHAPTER,**Dan Coxworth

Summary: Review and discussion of the draft Transit Chapter of the Long Range Transportation Plan. Link to the draft chapter: <a href="http://www.svmpo.org/wp-content/uploads/2015/08/SVMPO\_Transit.pdf">http://www.svmpo.org/wp-content/uploads/2015/08/SVMPO\_Transit.pdf</a>

Administrator Coxworth introduced the Transit Chapter of the Long Range Transportation Plan. Comments and suggestions were made by the TAC that will be incorporated in the draft Chapter. Mr.

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Coxworth explained that MPO staff and resources are available to transit providers that serve the area, but that the MPO does not have control over the operations of transit agencies and that Vista Transit is an entity of the City of Sierra Vista.

Mr. McLachlan asked Ryan Kooi to explain annual ridership numbers and how they are calculated. Mr. Kooi explained that ridership numbers are calculated and reported based on ADOT standards. Each person that gets on a bus is counted and that if the same person gets on the bus four times in a day that equals four riders, not one.

Jere Fredenburgh questioned the numbers and the number of riders that Vista Transit serves on an annual basis.

Karen Lamberton explained that the population of Sierra Vista continues to age and that the reliance on transit in the community will only increase.

Mr. McLachlan suggested adding more data on annual ridership.

No Motion was made.

# 7. DISCUSSION: TITLE VI & LIMITED ENGLISH PROFICIENCY (LEP) PLAN Dan Coxworth

Summary: A requirement of the MPO. Draft Title VI Plan and Limited English Proficiency (LEP) Plan for review and comments by the TAC. The Plan was placed in a 30-day public review comment period and will be reviewed by the Board at their next regular scheduled meeting on September 23.

Administrator Coxworth introduced the item, explaining that the Draft Title VI Plan is a requirement of the SVMPO as a result of receiving federal aid. The Draft Title VI Plan in currently in a 30-day public review and will be reviewed by the Board at their next meeting on Sept. 23, 2015.

No motion was made.

### 8. FUTURE AGENDA ITEMS

The TAC will review at their next meeting another Chapter of the Long Range Transportation Plan.

Chair Riggs asked about the timeframe for the Fry Blvd. Corridor Study.

Updates were provided by the Mr. Hoffman concerning the Strategic Highway Safety Plan.

# 9. UPCOMING SCHEDULED MEETINGS

➤ SVMPO Board Meeting – Sept. 23, 2015, 3:30 p.m., City Hall

#### 10. ADJOURNMENT OF REGULAR MEETING

Chair Riggs adjourned the meeting at 2:49.

Web: www.SVMPO.org



# SIERRA VISTA SIDEWALKS

# Inventory & Implementation Plan

# **Abstract**

Inventory of sidewalks and pedestrian gap analysis in the City of Sierra Vista. Sidewalk implementation plan with recommendations to improve access, pedestrian safety experience, and increase pedestrian activity

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# 1. Study Purpose and Background

The City of Sierra Vista is committed to becoming a more pedestrian friendly community as part of an overall plan to develop a balanced transportation system that successfully accommodates transit users, bicyclists, motorists, and pedestrians.

The Sierra Vista Metropolitan Planning Organization's (SVMPO) long range transportation plan establishes the need for developing convenient and efficient pedestrian sidewalk infrastructure across the community in order to improve the livability, safety, and transportation choices for Sierra Vista residents.

To develop a complete sidewalk network that achieves the goals as established in the SVMPO Transportation Plan, it is crucial to first identify gaps in the existing sidewalks as well as inadequate ADA ramp infrastructure through an inventory process. Identifying and correcting shortcomings in the sidewalk network over time ensures that sidewalk infrastructure in the City of Sierra Vista meets the needs of all users, especially for persons with disabilities and limited mobility.

# A. Purpose Statement

The purpose of this Pedestrian Gap Analysis (PGA) and implementation plan is to (1) discuss results of the completed sidewalk and ADA ramp inventory, (2) develop prioritization of sidewalk infrastructure improvements, (3) implement and outline a new public petition process for sidewalk development moving forward, and (4) recommend specific future projects using new sidewalk prioritizations.

# B. Americans with Disabilities Act

In 1990 Congress enacted the Americans with Disabilities Act which prohibits discrimination against people who have disabilities. Title II of the Act requires public services and public transportation to be accessible to those with disabilities. Newly constructed pedestrian facilities must be ADA compliant in addition to existing redeveloped infrastructure. This act and subsequent laws since then have emphasized the focus local governments need to have on providing complete accessible transportation facilities. (SVMPO)

# C. Sidewalk Development & Funding

Sidewalks in Sierra Vista are installed through the following means:

- City Roadway Projects and Sidewalk Installation The city constructs sidewalks where needed or as a part of new street development.
- ➤ Land Development Requirements In most cases, developers are required to construct sidewalks along property road frontages as a part of a development code requirement.
- Individual Property Installation Residents of the city are enabled to construct sidewalks along their property frontage if they desire to do so.

Sidewalk development, improvements, and general maintenance in Sierra Vista is primarily funded through State Highway User Revenue Funds (HURF), Surface Transportation Funds (STP), Sierra Vista General Funds, and private development.

# 2. Inventory Process

The database development and sidewalk inventory process began in February 2015 and ended in November 2015. The inventory focused on mapping all public sidewalks within the City of Sierra Vista as well as identifying all ADA ramps and recording their compliance. The mapping included not only sidewalks found along major arterials, and collectors, but also along all local streets as identified in the City of Sierra Vista's GIS streets database. This process resulted in a complete network record of all existent and non-existent sidewalk segments within the city. It also resulted in a complete inventory of all existing ADA ramp infrastructure.

The sidewalk and ADA ramp inventory was conducted in a multi-step process:

- 1. All streets were evaluated for sidewalks and ADA ramps using a variety of datasets. These included the Cochise County Orthographic GIS imagery (2009 & 2013) and the Google Maps Street View. The 1 meter resolution orthographic images allow the user to view the entire city at nadir or "birds-eye view" in clear detail. Google Maps Street View allowed the user to view the streets at ground level with a series of close-up photo images. Google Maps Street View was used to verify areas where the ortho-imagery was obscure. Digitizing was used to map sidewalks where visible.
- 2. Field work was utilized to verify areas of the city where the aforementioned datasets were obscure. These include areas that were currently under construction within the City, as well as the areas that had recent development since the most recent ortho-imagery and Google photo images. A tablet utilizing the Recon App was used to update the database from the field.

3. Each sidewalk segment was recorded and mapped in the City's Geographic Information Systems (GIS). The database contains key information for each sidewalk segment in the form of the street name, roadway classification (local, collector, or arterial), segment location, existence status, length, width, and any additional comments. For this inventory, sidewalks are mapped based on whether or not they exist.

For the purpose of this inventory, sidewalks are defined as all concrete or asphalt-paved surfaces that are designated for pedestrian activity. Sidewalk segments were recorded and displayed based on their presence. Multi-use paths, bike lanes, and trails are not considered sidewalk surfaces for this analysis but were used in the pedestrian gap analysis to identify areas of the community where pedestrian facilities are needed.

See **Appendix A: Sierra Vista Sidewalk Inventory Map** which shows the completed sidewalk inventory for all of Sierra Vista with green lines representing existing sidewalks and red representing areas absent of sidewalks or the "gaps" where sidewalks are needed.

4. ADA ramps data were also mapped in the Sierra Vista GIS. Each ADA ramp is represented by a point and contains information pertaining to compliance. The ADA ramps were classified as meeting ADA compliance, having some ADA compliance, or not being ADA compliant. These levels of compliance were developed for the sole purpose of this analysis and are not a complete representation of ADA condition in the community. For this analysis, the ADA ramp conditions are defined below:



 Meets ADA: Ramp has compliant slope, graded lines or truncated domes, and does not have any impediments. The transitions to road surfaces are flush.



Meets: Truncated domes, gradual



Meets: Graded indicator lines, flush



Some ADA: Ramp has compliant slope but lacks graded lines or truncated domes. There may be slight impediments with road transitions. Compliant in previous years.







Some: Gradual slope, no barriers



 Not ADA: Ramps do not exist. Curb areas either drop or have a rolling characteristic and are not handicap friendly. Sidewalk ends abruptly. Significant impediments for ADA individuals.



Not: Curb drops, uneven surfaces



Not: Rolling curb, obstructions

See **Appendix B: Sierra Vista ADA Inventory Map** which shows the completed ADA inventory for all of Sierra Vista with different colored points representing ADA condition of all city owned ramps.

#### 3. Results

Although sidewalks are required of most new development projects and are constructed by the city along new roadways, there are still approximately 86 miles of roadway that lack sidewalks. This is primarily due to previous city and county policies that did not require sidewalk construction with development. Table 1 shows the results of the sidewalk inventory with complete sidewalk data for each road type in the City of Sierra Vista.

Street Type	Street Type Existing (miles)		Total Distance (miles)	Percent Incomplete	Percent Complete	
Arterial	<b>Arterial</b> 27.6 3.		31.1	11.25%	88.75%	
Collector	38.1 17		55.1	30.85%	69.15%	
Local	190.5	66.1	256.6	25.76%	74.24%	
All Streets	Il Streets 256.3 86.6		342.9	25.26%	74.74%	

Table 1: Sidewalk Data (Sierra Vista GIS)

As policies and laws relating to ADA requirements change, so too do the criteria for developing ADA compliant ramps. Newly built infrastructure is completed with the most current ADA regulations in place. Regardless, this still leaves many older areas of Sierra Vista with outdated ADA ramps that are no longer up to current compliance, and in some cases, are still not compliant altogether. Table 2 shows the results of the ADA inventory with a total count of varying ADA ramp conditions within the city.

ADA Ramp/Condition	ADA Ramp Count	Percent of Total		
Meets ADA	2156	60.51%		
Some ADA	883	24.78%		
Not ADA	524	14.71%		
All ADA Ramps	3563	100%		

Table 2: ADA Ramp Data (Sierra Vista GIS)

# 4. Prioritizing Pedestrian Improvements

Once the inventory was completed, a series of high-priority sidewalk improvements was identified by the SVMPO. The intent of this list is to demonstrate which community features should be prioritized for sidewalk connectivity as funding becomes available. The criteria below do not follow any particular rank and exist simply as planning guidelines to identify priority

areas for future sidewalk development. Arterial and collector roads that exhibit the following criteria receive higher precedence than local streets. The criteria for the priority list are:

#### Schools

Schools attract large volumes of pedestrians during peak traffic hours. Many students often live within walking distance and are too young to drive. In particular, elementary school students who walk to school are the most vulnerable pedestrians due to the peak traffic times they travel to and from school.

# > Transit

Fixed-route transit service encourages pedestrian activity in the areas surrounding bus stops. Key bus stops attract a high volume of pedestrian activity throughout the duration of a day, especially around the transit center and other activity centers. ADA paratransit riders also use the fixed-route bus stops.

# Commercial Activity Areas for Services & Employment

Local businesses, retail, and public facilities are considered major pedestrian trip destinations. These places often have consistent pedestrian activity.

#### Parks and Recreational Areas

Parks and other recreational areas attract pedestrians for health and wellbeing reasons. In addition, parks attract younger pedestrians who cannot drive. These areas tend to have comparatively high pedestrian activity.

# Pedestrian Crash History

Intersections and segments with a history of pedestrian related crashes need to be taken into consideration for sidewalk prioritization. Delineated sidewalks are vital to the safety of pedestrians and motorists.

## 4.1. Public Petition Process

Residents, business, or property owners can petition the city for sidewalk development along any street.

Residents can petition for new sidewalk to be constructed and financed by all property owners in the areas where sidewalk is requested. The process would require majority consent of 51% of property owners in the improvement area.

In cases where property owner funding is not wanted but interest in a sidewalk still remains, the project area would be placed on the city's sidewalk improvements list for when funding becomes available.

See Appendix C: Public Sidewalk Petition Form

#### 5. Recommendation Areas

The high priority list of recommended sidewalks or other pedestrian improvement areas are based on the criteria established in this plan. The City of Sierra Vista can use the list to plan and budget for new sidewalks in the coming years. The project recommendations below are not a complete list of areas within the City without sidewalks, but a list of high priority needs.

See Appendix D: High Priority Sidewalk Improvement Map & Specified Area Sub-Maps

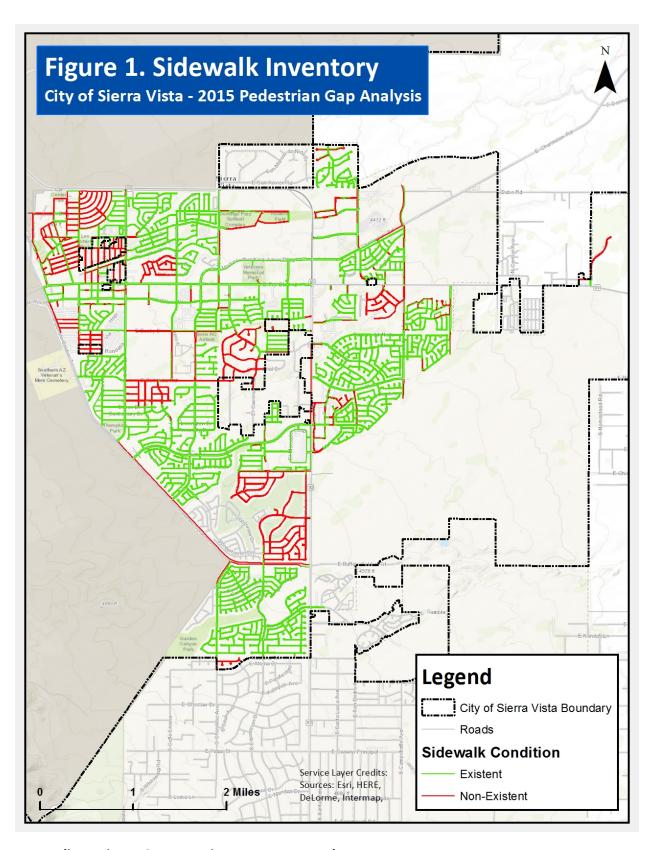
See Appendix E: High Priority Sidewalk/Pedestrian Improvements List

# 6. Next Steps

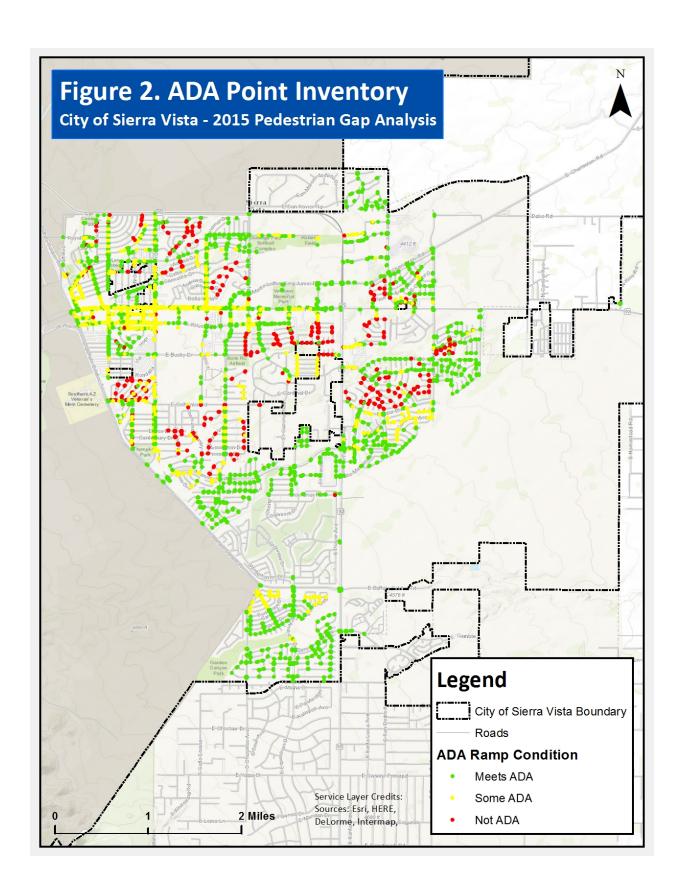
This Sidewalk Transition Plan is a planning tool that can be used to identify, prioritize, and address areas in Sierra Vista that lack pedestrian infrastructure where needed. The development of pedestrian infrastructure, whether it is sidewalks or multi-use paths, increases the efficiency and diversity of the entire transportation network. Creating a safe environment for pedestrians will work to promote walking as a practical form of transportation. While improvements are dependent on available funding, this plan serves as a step towards reaching improvements. Moving forward, these are the next steps:

- 1. Construct new improvements based on the results of this inventory and priority areas.
- 2. Implement public petitions process for further sidewalk improvement.
- 3. Continue to develop and improve ADA & Sidewalk datasets as established in this PGA.
- 4. Revisit and identify new priority areas as needed with incorporation of public comments.

**Appendix A: Figure 1. Sidewalk Inventory Results** 



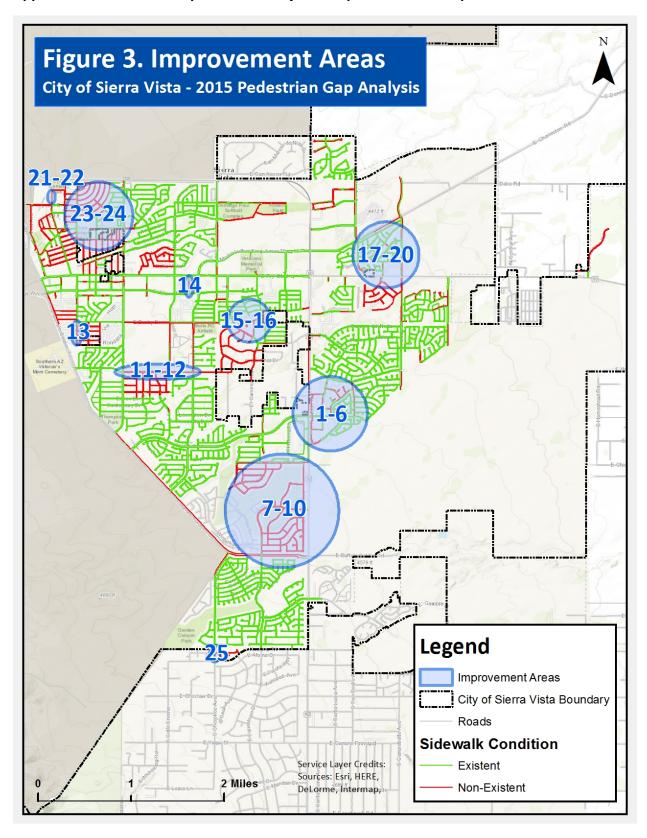
**Appendix B: Figure 2. ADA Point Inventory Results** 

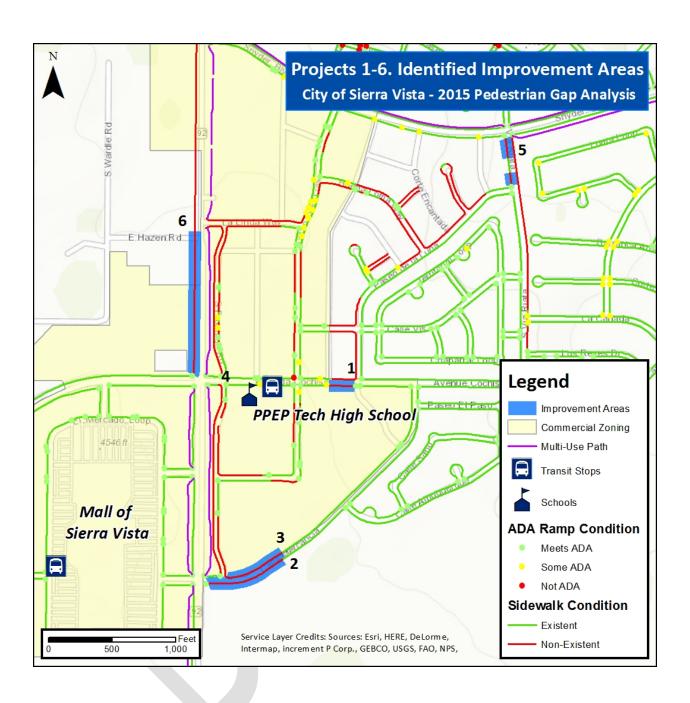


# **Appendix C: Public Sidewalk Petition Form**

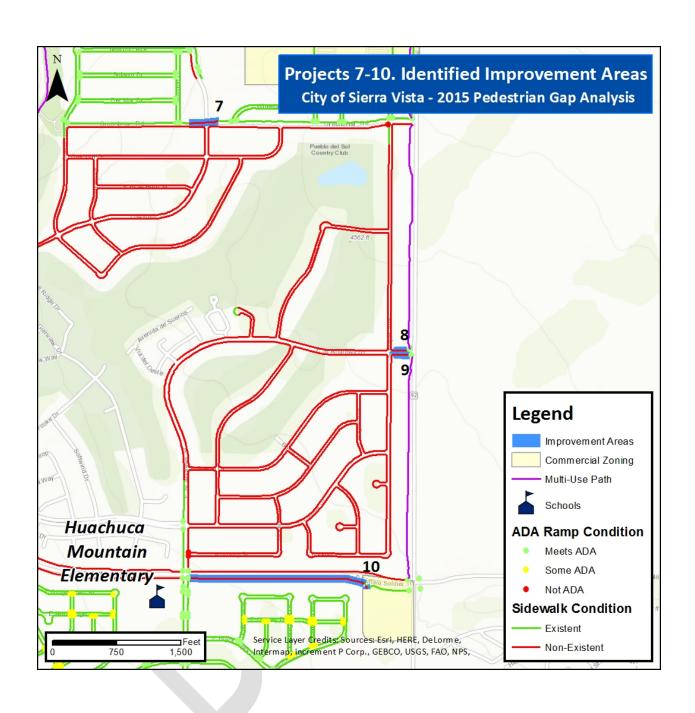
(Sidewalk Petition Form here)

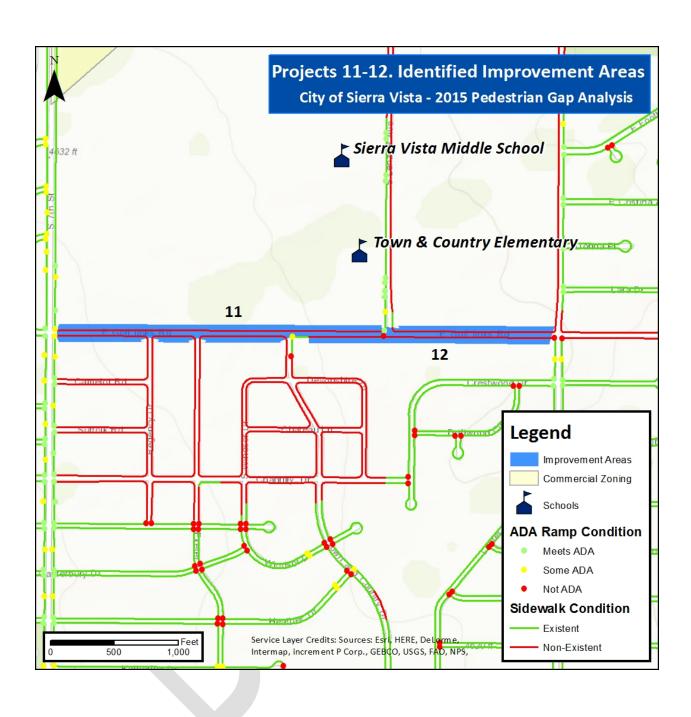
Appendix D: Pedestrian Improvement Projects Map & Sub-Area Maps





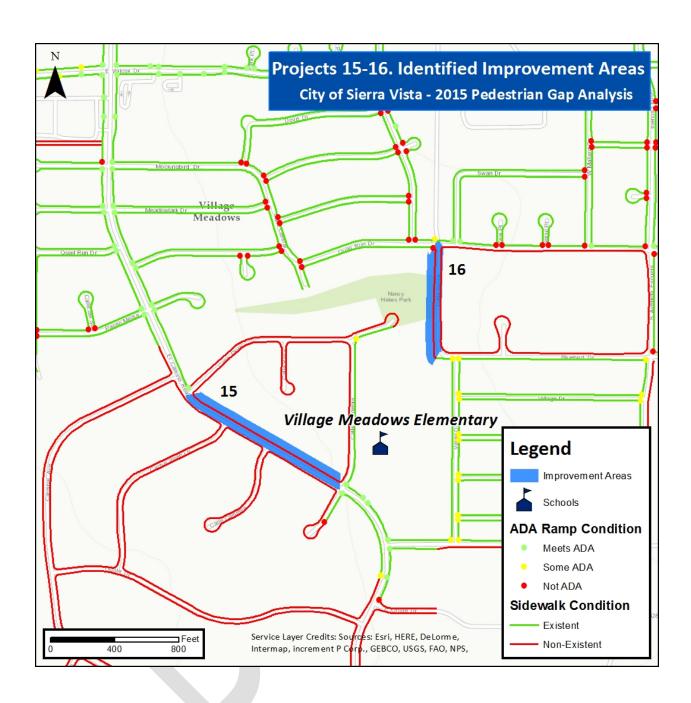




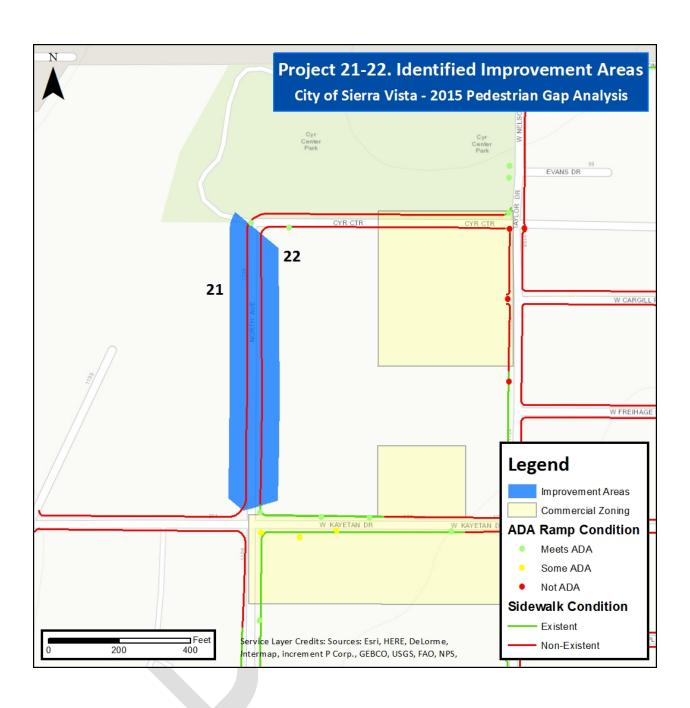


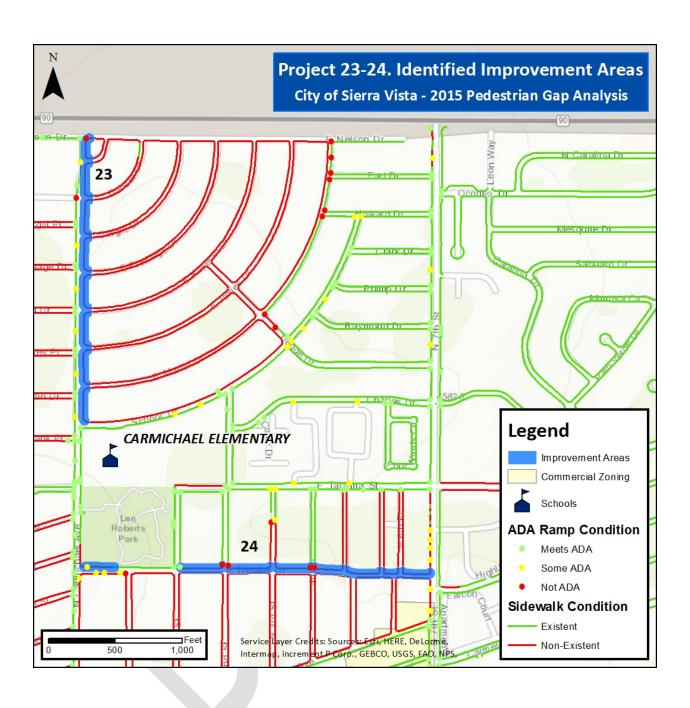














Appendix E: High Priority Sidwalk/Pedestrian Improvements										
Project #	Road	Road Type	Side of Street		Length	Width	Cost	Comments	ADA Ramp Upgrades	Added to List
1	Avenida Cochise	Minor Arterial	South	Between Paseo San Luis & Calle Mercancia	204'	5'		Access to Transit Stop	Yes	Nov. 2015
2	Calle Mercancia	Collector	South	E. of Hwy 92	640'	5'		Access to Commerical Activity (Mall of SV)	No	Nov. 2015
								Access to Comericial Activity (Mall of SV) (Cochise		
3	Calle Mercancia	Collector	North	E. of Hwy 92	488'	5'		Vista)	Yes	Nov. 2015
4	Avenida Cochise	Minor Arterial	South	SW Corner of Frontage Road	35'	5'		Commerical Area Access	Yes	Nov. 2015
5	S. Via Riata	Collector	West	Between Snyder & Paseo De La Luna	380'	5'		Residential Linkage, Commercial Area Access, Community Mail Box	No	Nov. 2015
	Ulah ya 02		14/	Between E. Hazen & Avenida Cochise	44.601	E!		Residential Linkage, Commercial Area Access	Yes	N 2015
6	Highway 92	Hwy	West	Between Mission & Wheelan	1160'	5'		Access to Park (County Club Park, South Garden	res	Nov. 2015
7	Greenbrier Rd	Collector	North	Loop	352'	5'		Linear Park), MUP	No	Nov. 2015
0	Coint Androus Dr	Callactar	North	Between Player Ave & Hwy 92	104	5'		MUP Connectivity (Hwy 92)	Yes	Nov. 2015
8	Saint Andrews Dr	Collector	North	between Player Ave & nwy 92	184'	5		MOP Connectivity (nwy 52)	Tes	Nov. 2015
9	Saint Andrews Dr	Collector	South	Between Player Ave & Hwy 92	214'	5'		MUP Connectivity (Hwy 92)	Yes	Nov. 2015
10	E. Buffalo Soldier Trl	Arterial	South	Between Saint Andrews Dr & Hwy 92	2110'	5'		Commerical Area (future) Access	Yes	Nov. 2015
				21. 21.0.0.0				Schools Access (Town & County Elementary, Joyce	,	
11	E. Golf Links Road	Collector	North	Between 7th St & Coronado Dr	3840'	5'		Clark Middle) Schools Access (Town & County Elementary, Joyce	Yes	Nov. 2015
12	E. Golf Links Road	Collector	South	Between 7th St & Coronado Dr	3681'	5'		Clark Middle)	Yes	Nov. 2015
42	C Carry tale and A ca	NATION AND OTHER	East	Between Sheila Ln & Timothy Ln	0001	E1		Parks Access (Claramitaro, Timothy Lane), Access to Transit Stop	Yes	N 2045
13	S Carmichael Ave	Minor Arterial	East	Between E. Fry Boulevard & E.	998'	5'		to transit stop	162	Nov. 2015
14	Bel Aire Pl	Collector	East	Wilcox Dr	678'	5'		Commercial Area Access	Yes	Nov. 2015
15	El Camino Real	Collector	North	Between Calle Parkway & Calle Gardenia	1070'	5'		Access to School (Village Meadows Elementary)	Yes	Nov. 2015
13	Li Callillo Real	Collector	North	Between Quail Run Dr & Blue	1070	J		Access to School (Village Meadows Elementary),	103	100. 2013
16	S Calle Portal	Local	West	Bird Dr	702'	5'		Park (Nancy Hakes)	Yes	Nov. 2015
17	N. Colombo Ave	Collector	Wost	Between E. Evergreen Dr & E. Mediterranean Dr	448'	5'		Neighborhood Access, MUP Connectivity	No	Nov. 2015
1/	N. Colombo Ave	Collector	West	Between E. Evergreen Dr & E.	448	5		Neighborhood Access, Wor Connectivity	140	Nov. 2015
18	Guilio Cesare Ave	Collector	West	Galileo Dr	559'	5'		Access to Transit Stops	No	Nov. 2015
19	Rainbow Way	Local	East	NE Corner of Rainbow Way	72'	5'		Connectivity to MUP, Access to Transit Stop	No	Nov. 2015
13	Nambow way	Local	Lust		72	J				1404. 2013
20	Rainbow Way	Local	West	NW Corner of Rainbow Way	172'	5'		Connectivity to MUP, Access to Transit Stop	Yes	Nov. 2015
				From W Cyr Center To NW				Connectivity to MUP, Park (Soldier Creek, Cyr Center), Commercial Areas *Land Developer		
21	North Ave	Collector	West	Kayetan Dr	815'	5'		Agreement	No	Nov. 2015
								Connectivity to MUP, Park (Soldier Creek, Cyr		
22		o !! .	<b>.</b> .	From W Cyr Center To NW	7741	-1		Center), Commercial Areas *Land Developer	N	
22	North Ave	Collector	East	Kayetan Dr	771'	5'		Agreement	No	Nov. 2015
23	N. Carmichael Ave	Local	East	From Nelson Dr To School Dr	2032'	5'		School Access (Carmichael Elementary)	Yes	Nov. 2015
24	F. Theater Dr	Local	Nexth	Between N. Carmichael Ave &	1700	F'		Access to School (Carmichael Elementary), Park	Yes	Nov. 2015
24	E. Theater Dr	Local	North	7th St  Between Isla Bonita Dr & E.	1788'	5'		(Lee Roberts)	res	Nov. 2015
25	S. Cherokee Ave	Local	West	Kachina Trail	642'	5'		Connection to MUP	Yes	Nov. 2015
26	S Charakaa Aya	Local	Eact	Between Isla Bonita Dr & E. Kachina Trail	621	5'		Connection to MUP	Yes	Nov. 2015
26	S. Cherokee Ave	Local	East	Nacrilla Itali	621'	3		Connection to Wor	163	Nov. 2015
										Page 24