#### **CITY OF EL PASO, TEXAS** AGENDA ITEM DEPARTMENT HEAD'S SUMMARY FORM

DEPARTMENT:	International Bridges Department
AGENDA DATE:	July 12, 2016
CONTACT PERSON/PHONE:	Mathew McElroy, (915) 533-7428, <u>McElroyMX@elpasotexas.gov</u>
DISTRICT(S) AFFECTED:	All Districts

#### **SUBJECT:**

That the Mayor be authorized to sign an Interlocal Agreement between the City of El Paso and the Camino Real Regional Mobility Authority ("CRRMA"), for the City to provide the FOUR HUNDRED SEVEN THOUSAND EIGHT HUNDRED AND NO/100 (\$407,800.00) in funding necessary for the inclusion of the City's international bridges into the scope of services for the CRRMA's Metropia Project, for the benefit of both parties and the area's traveling public.

#### **BACKGROUND/DISCUSSION:**

Various regional partners, including the Texas Department of Transportation, the El Paso Metropolitan Planning Organization and the Camino Real Regional Mobility Authority (CRRMA) are cooperatively working on developing a crowdsourced traffic and navigation mobile application to reduce regional congestion in El Paso, TX. This Interlocal Agreement, by and between the City of El Paso and the CRRMA, will allow for an enhancement to the existing Metropia mobile app to add all El Paso ports of entry (POE) as well as the Ciudad Juarez street network that will aid in bridge crossing wait time data collection and measurement, real-time bridge wait time information dissemination and cross-border traffic management and congestion reduction. In addition, the Metropia mobile application will allow for the collection of segmented wait time data for all crossing types (passenger vehicles, pedestrians, and commercial traffic) at regional POEs including both northbound and southbound traffic.

#### **PRIOR COUNCIL ACTION:**

N/A

#### AMOUNT AND SOURCE OF FUNDING:

Metropia Project - Bridge Scope Budget - \$407,800

Funding Source - Section 560 "P3" Reimbursable Fee Agreement (International Bridges Restricted - 520010-564-3360-64870)

#### 

LEGAL: (if required)

FINANCE: (if required)

**DEPARTMENT HEAD:** 

Mathew S. McElroy International Bridges Department Director

**APPROVED FOR AGENDA:** 

CITY MANAGER: DATE:

#### **RESOLUTION**

That the Mayor be authorized to sign an Interlocal Agreement between the City of El Paso and the Camino Real Regional Mobility Authority ("CRRMA"), for the City to provide the FOUR HUNDRED SEVEN THOUSAND EIGHT HUNDRED AND NO/100 (\$407,800.00) in funding necessary for the inclusion of the City's international bridges into the scope of services for the CRRMA's Metropia Project, for the benefit of both parties and the area's traveling public.

ADOPTED this the \_\_\_\_\_ day of \_\_\_\_\_, 2016.

#### THE CITY OF EL PASO

**ATTEST:** 

Oscar Leeser Mayor

Richarda Duffy Momsen City Clerk

#### **APPROVED AS TO FORM:**

#### **APPROVED AS TO CONTENT:**

Josette Flores Assistant City Attorney Mathew McElroy Director of International Bridges

# STATE OF TEXAS§INTERLOCAL AGREEMENT§§FOR PROJECT CONTRIBUTIONSCOUNTY OF EL PASO§METROPIA PROJECT

THIS AGREEMENT is made and entered into effective as of the \_\_\_\_\_ day of \_\_\_\_\_\_, 2016 by and between the CITY OF EL PASO (the "City") and the CAMINO REAL REGIONAL MOBILITY AUTHORITY (the "CRRMA"), each to be referred to herein individually as a "Party" and collectively as the "Parties."

#### WITNESSETH

**WHEREAS**, the City is a Home Rule City operating pursuant to the laws of the State of Texas; and

**WHEREAS**, the CRRMA is a regional mobility authority created and operating pursuant to Chapter 370 of the Texas Transportation Code and 43 TEX. ADMIN. CODE §§26.1 *et. seq.* and is a body politic and corporate and political subdivision of the State of Texas; and

**WHEREAS,** Chapter 791 of the Texas Government Code provides that any one or more public agencies may contract with each other for the performance of governmental functions or services in which the contracting parties are mutually interested; and

WHEREAS, various regional partners, including the Texas Department of Transportation, the El Paso Metropolitan Planning Organization and the CRRMA, are cooperatively working on an intelligent transportation system known as Metropia, which is a regional congestion management system intending to reduce regional congestion and mobile source emissions through the CRRMA's implementation of the Metropia Ecosystem (the "Metropia Project"); and

**WHEREAS**, the City, through its International Bridges Department, owns and operates several international crossings that would benefit from a regional congestion management system that, among other services, could provide predictive data to the City's bridge users, while also accurately identifying bridge crossing times in the region (the "Bridge Scope"); and

WHEREAS, the original scope and intent of the Metropia Project did not include the services contemplated by the Bridge Scope, the City and CRRMA now desire to expand the scope of the Metropia Project to include the Bridge Scope in order to expand the Metropia Project's intended benefits to the area's traveling public; and

**WHEREAS,** the City desires to provide the funding necessary for the inclusion of the Bridge Scope into the Metropia Project and the CRRMA agrees to manage the implementation of the increased scope of the Metropia Project, as doing so would be provide additional significant benefits to the Parties and the area's traveling public.

**NOW THEREFORE**, in consideration of the premises and of the mutual covenants and agreements of the Parties hereto, to be by them kept and performed as hereafter set forth, the CRRMA and City do agree as follows:

#### AGREEMENT

#### 1. Time Period Covered

This Agreement becomes effective upon the date first written above, and the Parties will consider it to be in full force and effect until the Bridge Scope, as more fully described in **ATTACHMENT A** of this Agreement, has been completed or unless this Agreement is terminated, as provided herein. Unless otherwise agreed to in writing by the CRRMA, the CRRMA shall have no further obligation with respect to the Bridge Scope after completion.

#### 2. Project Funding and Work Responsibilities

The CRRMA agrees to include the Bridge Scope developed by and between the City and Metropia, Inc. into the Metropia Project. The City agrees to pay for the tasks identified in the Bridge Scope Budget, as more fully described in **ATTACHMENT B** of this Agreement. The CRRMA agrees to manage Metropia Inc.'s implementation of the Bridge Scope into the Metropia Project in exchange for the administrative fee identified in **ATTACHMENT B**.

#### 3. Termination

This Agreement may be terminated in the following manner:

- A. By mutual written agreement and consent of both Parties;
- B. By either Party for convenience, upon written notice at least thirty (30) days in advance of the effective date of such termination; or
- C. By either Party upon the failure of the other Party to fulfill the obligations set forth in this Agreement.

If the Agreement is terminated in accordance with the above provisions, the City will be responsible for the payment of Bridge Scope costs incurred by the CRRMA on behalf of the City up to the time of termination.

#### 4. **Responsibilities of the Parties**

Both Parties acknowledge that neither is an agent, servant, employee of the other, nor are the Parties engaged in a joint enterprise, and each Party is responsible for its own acts and deeds and for those of its agents or employees during the performance of the work on the Metropia Project.

#### 5. Governmental Immunity

Nothing in this Agreement shall be deemed to waive, modify, or amend any legal defense available at law or in equity to either of the Parties nor to create any legal rights or claims on behalf of any third party. Neither Party waives, modifies, or alters to any extent whatsoever the availability of the defense of governmental immunity under the laws of the State of Texas and of the United States.

#### 6. Sole Agreement

In the event the terms of this Agreement are in conflict with the provisions of any other existing agreements between the City and the CRRMA, this Agreement shall take precedence over the other agreements in matters related to the Metropia Project and Bridge Scope.

#### 7. Successors and Assigns

The CRRMA and City each binds itself, its successors, executors, assigns, and administrators to the other Party to this Agreement and to the successors, executors, assigns, and administrators of such other Party in respect to all covenants of this Agreement.

#### 8. Amendments

This Agreement may be amended or modified upon the mutual written agreement of both Parties.

#### 9. Management of Work

Unless otherwise specifically stated herein, the CRRMA will manage and supervise all Bridge Scope work performed hereunder and provide such services as may be required to ensure that the Bridge Scope of the Metropia Project is accomplished in accordance with the scope of work approved by the City, as enumerated in **ATTACHMENT A**. The City and its authorized representatives may observe or inspect all work done for the Bridge Scope at reasonable times and places. If either Party believes the Bridge Scope is not being developed as originally contemplated, the Parties' designated representatives shall meet to discuss appropriate actions to ensure that any defects in the Bridge Scope or deviations from **ATTACHMENT A** are remedied. All correspondence and instructions to the provider of services for the Metropia Project will be the sole responsibility of the CRRMA. Unless otherwise agreed to in writing by the CRRMA, the CRRMA shall have no further obligation with respect to the Bridge Scope after completion of the tasks identified in **ATTACHMENT A**.

#### 10. Notices

All notices to either Party by the other required under this Agreement shall be delivered by handdelivery or sent by certified or U.S. mail, postage prepaid, addressed to such Party at the following addresses:

#### CITY OF EL PASO

City of El Paso P.O Box 1890 El Paso, Texas 79950-1890 Attn: City Manager

#### **CRRMA**

Camino Real Regional Mobility Authority 300 N. Campbell, 2<sup>nd</sup> Floor El Paso, Texas 79901 Attn: Executive Director

All notices shall be effective upon receipt. Either Party may change the above address by sending written notice of the change to the other. Either Party may request in writing that such notices shall be delivered personally or by certified U.S. mail and such request shall be honored and carried out by the other.

#### 11. Severability

If any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof, but rather this entire Agreement will be construed as if not containing the particular invalid or unenforceable provision(s), and the rights and obligations of the Parties shall be construed and enforced in accordance therewith. The Parties acknowledge that if any provision of this Agreement is determined to be invalid or unenforceable, it is their desire and intention that such provision be reformed and construed in such a manner that it will, to the maximum extent practicable, give effect to the intent of this Agreement and be deemed to be validated and enforceable.

#### 12. Venue

For any and all disputes arising under this Agreement, venue shall be in El Paso County, Texas.

#### **13.** Signatory Warranty

Each signatory warrants that the signatory has necessary authority to execute this Agreement on behalf of the entity represented.

**IN WITNESS WHEREOF**, the CRRMA and City have executed this Agreement as of the date first written above.

#### CITY OF EL PASO

ATTEST:

Oscar Leeser Mayor

Richarda D. Momsen City Clerk

#### **APPROVED AS TO FORM:**

Josette Flores Assistant City Attorney

#### **APPROVED AS TO CONTENT:**

Mathew McElroy, Director International Bridges Department

#### CAMINO REAL REGIONAL MOBILITY AUTHORITY

Joe R. Fernandez Board Secretary

**ATTEST:** 

Susan A. Melendez Chair

### ATTACHMENT A

### EL PASO REGION PORT OF ENTRY SYSTEM WAIT TIME ESTIMATION AND PREDICTION PROJECT

### **BRIDGE SCOPE**

### EL PASO REGION PORT OF ENTRY SYSTEM WAIT TIME ESTIMATION AND PREDICTION

PREPARED FOR: CRRMA & CITY OF EL PASO

**JUNE 2016** 



Prepared by: Metropia Inc.

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#### 1 Introduction

This proposal is aimed at providing task descriptions for a deployment of Port-of-Entry (POE) north and southbound wait time estimation, prediction, and routing capabilities for the El Paso/Ciudad Juarez region. The concept of operation is to promote the Metropia App to border crossers including pedestrians, and personal and commercial vehicles via various outreach channels and mechanisms. Through the use of Metropia, the second-by-second trajectories will be collected in the historical database and used in real-time prediction algorithms in order to estimate and predict network street travel time and border crossing wait time by mode at each POE. In other words, not only POE border crossing wait time will be provided but also the ability to select different POEs and their associated routes. The goal is to better balance the queue and wait time among different POEs under various operating conditions. If capacity (e.g. lane closure) change or disruption is observed or known *a priori*, an active prediction algorithm will be activated in order to proactively alert Metropia users.

#### 2 Task List

#### 2.1 Task 1: Refine Concept of Operations (Week 1-12)

The basic concept of operations (ConOps) of this project is to extend the Metropia services and capabilities to help the City of El Paso and Ciudad Juarez better estimate and predict the Port-of-Entry (POE) wait time in order to better inform border crossers about the travel conditions at all POEs and to help such crossers better plan their travel under various conditions. The developed capability will also be scalable to allow better coordination and POE system traffic load balancing in times of demand-supply disturbances.

Metropia will provide the City with the following deliverables:

- 1. Creation of a fully integrated regional POE system and Ciudad Juarez traffic network supporting the use of the Metropia App in Ciudad Juarez.
- 2. Providing access to Metropia anonymized data as listed in the Metropia Synergy Data Licensing Agreement.
- 3. Metropia will develop and deliver an Application Program Interface (API) that will allow the City to automatically download the licensed data. Metropia has the right to drop or queue any download request when Metropia deems necessary such as when the Metropia system is undertaking other mission critical activities or under heavy loads. Metropia will do its best to ensure adequate computing resources are made available for this project.
- 4. Providing access to the Periscope Dashboard user interface system for dashboard viewing, download customizable reports, and access to the licensed data. Access will be granted to multiple users within the City of El Paso's International Bridges Department and the Department of Information Technology Services. A minimum of ten (10) user accounts will be provided. Metropia will provide user training to the City on how to access and use the Dashboard user interface system. The City shall notify Metropia within three (3) business days when any of the 10 users is no longer assigned to any duty that requires access to the Metropia data.
- 5. Both the API and the Dashboard user interface system will allow users to download the licensed data.



- 6. Metropia and the City will work together during two (2) work sessions (at a minimum) to discuss, define, customize, and develop the Metropia App, Metropia data, API, Dashboard user interface system, as well as the travel segments required for all crossing types (POV, PED, and Cargo Standard and FAST) both northbound and southbound traffic at all ports of entry in the area.
- 7. The dashboard user interface system will be capable of being integrated with the City of El Paso's website for border crossing wait time and traffic information dissemination to the public.
- 8. Metropia will continuously work with the City on collecting survey responses, from Metropia app users, via the app regarding various issues such as trip information, app user experience and feedback, and cross-border travel patterns to name a few.

Once this project is completed, it is envisioned that a traveler in the greater El Paso/Ciudad Juarez region would be able to use the Metropia App to select any origin-destination pair to plan their northbound or southbound crossing through the POEs (or any Origin-Destination pair as desired within El Paso or Ciudad Juarez) as shown in Figure 1. This platform will also create an opportunity to further collaborate with companies in the maquiladora and transportation industries in the future to better plan and schedule freight crossing activities in order to reduce idle travel time, cost and, hence, improve productivity.



#### Figure 1: Concept of Operations - Metropia Landing Page with Specified Origin in Ciudad Juarez and Destination in El Paso

The departure time and route selection table as illustrated in Figure 2 will allow the user to select the best time to leave and best route to take depending on the user's need and schedule. In the event that a POE wait time is significantly increased, the Metropia traffic prediction and routing engine would automatically recommend a faster POE for the driver to choose (plus incentive). This real-time adjustment of available data would help both personal and commercial crossers to make a smarter travel choice to save time and operating costs.





Figure 2: Departure Time and Route Selection Options in Metropia App

#### 2.2 Task 2: Establish Ciudad Juarez Traffic Network (Week 1-4)

In order for the Metropia service to be viable to POE crossers, the first step is to extend the Metropia network coverage to Ciudad Juarez. Metropia Inc. will acquire the necessary map and traffic data and be in charge of cleaning the data and connecting that network with the existing El Paso network to create a unified bi-national model.

This task aims to collect necessary data from available sources as part of the initial model establishments. Existing data sources will be identified by working with City of El Paso and CRRMA and possibly the counterpart agency in Ciudad Juarez. National data sources that Metropia has access to will be used by default. The outcome of this task is a data collection plan that will be utilized in this project. Since routing will also be provided to Juárez, a substantial amount of work will be needed to correctly code the network geometries and attributes in the model.

# 2.3 Task 3: Joint City of El Paso and Metropia Focus Groups, Future Customer Engagement, and Marketing and Outreach Sessions (Week 1-24)

Metropia will participate with the City of El Paso in joint focus groups and future customer engagement, and marketing and outreach sessions in El Paso, TX and Ciudad Juarez, MX. These meetings (minimum of six (6)) will provide both parties with an opportunity to gain direct input and customer feedback from bridge operators, industry stakeholders, and future Metropia App users to aid in app development, incentive structure-tuning, and app deployment and potential technology issues to name a few.



# 2.4 Task 4: Bootstrapping Data Collection for POE Waiting Time Estimation Model Calibration (Week 4-12)

The POE is a rather unique environment that we suspect existing data sources may not be sufficient for permitting accurate POE waiting time estimation prediction so more GPS-based data are needed. However, this is more like a "Catch 22" problem – Metropia needs to provide accurate waiting information in order to produce great value for the users of Metropia, and then allow Metropia to collect more GPS data, but the existing data may fall short in enabling Metropia to provide sufficient accuracy and therefore not creating the value that would attract users to use Metropia.

This challenge becomes more prominent if the traffic estimation, prediction, and routing capabilities are to be made available to all Ciudad Juarez residents. Consequently, the data collection effort needs to be greatly expanded. Currently Ciudad Juarez does not have the comparable traffic data collection infrastructure as does El Paso. Installing extensive traffic detectors is financially prohibitive and not sustainable long-term.

Our proposed approach is to use Metropia mobile data to help Ciudad Juarez "leapfrog" and to directly rely on Metropia mobile data to quickly collect needed data. What is proposed herein is a bootstrapping data collection period in which we promote Metropia as a tool to solicit user's support to help collect border crossing wait time regional link travel times. Users are encouraged to use the App to help collect wait time and be incentivized with using the App. The possible incentive process is drawing a raffle to control the total budget for data collection. It is anticipated that this period will last for two months. As shown in Figure 3 and Figure 4, learning from Tucson and Austin, a sufficient amount of traffic data can be collected for the entire region in 1-2 months for the purpose of bootstrapping the regional traffic estimation and prediction capabilities.



Figure 3: Collected Traffic Data in Tucson in One Month (a blue dot represent one GPS point, a red dot represents sufficient repeated observations)





Figure 4: Collected Traffic Data in Austin after One Month

#### 2.5 Task 5: POE Wait Time Estimation Model Calibration (Week 6-20)

In this task, the POE wait time and the regional traffic estimation model will be calibrated using all the data sources and the data collected in Task 4.

#### 2.6 Task 6: Integration with Existing Traveler Information System (ATIS) (Week 8-20)

We will work with the City of El Paso and necessary regional agency and stakeholder groups to integrate the new capability with the existing and new dissemination channels to ensure that the latest border crossing wait time information is properly posted to the needed sources in a timely manner. We will also integrate any POE incident information to our system in order to predict the future wait time in the case of POE operation condition changes, such as primary inspection lane closures.

#### 2.7 Task 7: Alpha testing (Week 20-22)

The initial implemented version will be alpha tested by the Metropia team. Then the tested version will be submitted to CRRMA, City of El Paso, and necessary stakeholder groups for review. The system will continue to be improved based on user feedback and field testing results.



#### 2.8 Task 8: Beta testing (Week 22-24)

City of El Paso, CRRMA, and necessary stakeholder groups will review and further test the submitted version. Minor adjustments to the App may be based on City of El Paso and CRRMA's comments and feedback.

#### 2.9 Task 9: Build-out and Test of Real-Time and Offline Data Analytics Capabilities (Month 2-5)

This task starts from working with the City of El Paso staff refining the real-time and offline data analytics framework and approach similar to what is shown in Figure 5. The primary developments focus on developing:

- A dashboard user interface system that allows the City of El Paso to have full access to all licensed data.
- An Application Program Interface (API) that will allow the City to automatically download licensed data.
- A database and dashboard system that is optimized for this application that allows the user to download customizable reports as needed.
- A web-based dashboard allowing real-time traffic monitoring for City of El Paso staff.
- Query functions to access Metropia licensed data as well as the travel segments required for all crossing types (POV, PED, and Cargo Standard and FAST) both northbound and southbound traffic at all ports of entry in the area.
- Historical trend view of traffic congestion and wait time information for all POEs.
- Off-line analysis for traffic data along all POE corridors by vehicle types and demographic info.
- Capabilities that allow City of El Paso staff to perform origin-destination analysis.
- A web-based predicted wait time and traffic congestion information for all POE.

Proper training using the dashboard and analytical capabilities to City of El Paso staff will also be delivered.



Figure 5: Traffic and Wait Time Data Collection and Analytics Framework

Metropia Inc. |



#### 2.10 Task 10: Ongoing Operations and Data Collection (Month 6-24)

Starting Month 6, the data collection activities will be publicized to regional travelers focusing on border crossers. Outreach activities will be planned and executed in collaboration with City of El Paso. Monthly meetings with City of El Paso to review results and to refine the data analytics capabilities will be held in order to address issues arising from the operations and needs for any adjustment as deemed necessary by City of El Paso. It is envisioned that the mix of points and raffle will be implemented as an incentive process for the border crossers utilizing the regional ports of entry.

#### 3 Schedule

The Metropia team estimates to finish all planned tasks within 24 months after receiving the notice to proceed (NTP) from the CRRMA.

### ATTACHMENT B

### EL PASO REGION PORT OF ENTRY SYSTEM WAIT TIME ESTIMATION AND PREDICTION PROJECT

### **BRIDGE SCOPE BUDGET**

The Bridge Scope Budget is **<u>\$407,800.00</u>**, which is due and payable by the City upon execution of this Agreement and includes all map, incentive, computing infrastructure and administrative fees necessary for the CRRMA's implementation of the Bridge Scope, as follows:

Map and Computing	\$24,000
Engineering Services	\$276,000
Data Collection Incentives	\$36,000
Outreach Activities	\$60,000
CRRMA Admin (3%)	\$11,800
TOTAL	\$407,800

[END OF EXHIBIT]



**International Bridges Metropia Mobile App** 

- Interlocal Agreement w/ CRRMA

#### **City Council Meeting**

Tuesday, July 12th, 2016

Strategic Goal #1 – Create an Environment Conducive to Strong, Sustainable Economic Development

"Delivering Outstanding Services"



# Metropia Mobile App

Demand management and data analytics platform

- What is Metropia?
- Interlocal Agreement w/CRRMA
- Next Steps

"Delivering Outstanding Services"



Demand management and data analytics platform

#### • What is Metropia?

- Interlocal Agreement w/CRRMA
- Next Steps

"Delivering Outstanding Services"



## Metropia Mobile App

Demand management and data analytics platform

- Metropia Mobile app system incentivizes commuters to choose departure times, routes, and modes to help reduce and eliminate traffic congestion
- Metropia Synergy demand management and data analytics platform achieves congestion mitigation via a social rewards-based ecosystem
- Already available in:
  - Tucson, AZ- New York, NY- Austin, TX- El Paso, TX
- Will soon be available in:
  - Los Angeles, CA
  - Orange County, CA

- Houston, TX

"Delivering Outstanding Services"



Demand management and data analytics platform



- Enter route and app shows you best times to leave
  - Avoid traffic
  - Spend less time on the road
  - Reduce CO2 emissions
- Real-time flow data and predictive algorithms forecast traffic patterns in 15-minute intervals

"Delivering Outstanding Services"



## Metropia Mobile App

Congestion mitigation via social rewards-based ecosystem

Kenter Kenter	210 PM T 11 My Metropia	014 800
Earned	9481 Points	
51	American Forests Plant a Tree Donation 300 Psess	¢
9 <sup>8</sup> 9 -	Starbucks \$5 Gift Card 750 Peem	e
2	Target \$5 Gift Card 750 Poes	¢
a	Amazon \$5 Gift Card 750 Parm	¢
A -	Starbucks \$25 Gift Card 3200 Puers	e
193	0 4	2

- Choose departure times to avoid congestion and earn points
- Redeem points on Amazon, Starbucks, Target, restaurants, music downloads, etc., even plant trees

"Delivering Outstanding Services"

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Screenshots



Source: Metropia Data Analytics (https://www.youtube.com/watch?v=IK\_P2vhOhPE&index=8&list=PLetXXAc2gD-AW0G9ePNzuPz9Z1eD68D94)

"Delivering Outstanding Services"



# Metropia Mobile App

Traffic Data



"Delivering Outstanding Services"



Traffic Data



"Delivering Outstanding Services"



# Metropia Mobile App

Traffic Data



Source: Metropia Data Analytics (https://www.youtube.com/watch?v=IK\_P2vhOhPE&index=8&list=PLetXXAc2gD-AW0G9ePNzuPz9Z1eD68D94)

"Delivering Outstanding Services"



Border Applications

- Border region applications
  - Applies to cargo, vehicle and pedestrian traffic -- both north and southbound
  - Provides real-time bridge wait times, alternative routes and departure times, and user-based incentives
- Timeline and budget
  - Interlocal agreement with CRRMA
  - 6 months for app development
  - 24 month contract
  - Bridge Scope Budget -- \$407,800

"Delivering Outstanding Services"

## Metropia Mobile App

Border Applications - Wait Times Using GPS



Image Source: Google Earth 2016

"Delivering Outstanding Services"



# Metropia Mobile App Regional POEs – Northbound and Southbound Traffic



Ysleta/Zaragoza POE Image Source: Google Earth 2016

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# Metropia Mobile App

Demand management and data analytics platform

- What is Metropia?
- Interlocal Agreement w/CRRMA •
- Next Steps

"Delivering Outstanding Services"



"Delivering Outstanding Services"

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# Metropia Mobile App

Documents

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- Interlocal Agreement | Camino Real Regional Mobility Authority
  - To manage Metropia, Inc.'s implementation of the Bridge Scope into the existing Metropia Project (TxDOT, MPO, CRRMA)
- Scope of Work | Metropia, Inc.
  - Fully integrated regional POE system and Ciudad Juarez traffic network with the existing Metropia App (traffic model will include both north and southbound crossings)
  - Application Program Interface (API) for automatic data downloads
  - · Access to Periscope Dashboard user interface system
  - Dashboard integration with CoEP's website
  - Segmented wait time data for all crossing types (POV, PED, and Cargo Standard and FAST) both northbound and southbound traffic at all POEs
  - Bridge user survey collection tool
- Licensing Agreement | Metropia, Inc.
  - Traffic data definitions
  - Access to and right-to-use all traffic data collected and generated by the Metropia App
  - Five year term
    "Delivering Outstanding Services"



Demand management and data analytics platform

- What is Metropia?
- Interlocal Agreement w/CRRMA
- Next Steps

"Delivering Outstanding Services"

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# Metropia Mobile App

Next Steps

- Scoping meeting with Metropia team
  - Work on defining wait-time data, segments, API automatic data downloads
  - Key information needed for app development
  - Establish Ciudad Juarez street network
  - POE wait-time estimation model calibration
  - July 2016
- Focus Groups
  - US and MX bridge users and operators
  - Future customer engagement events to address potential issues encountered in developing a bi-national crowdsourcing app
  - Marketing and outreach sessions (ELP, JRZ)
  - August 2016
- Alpha, Beta testing
  - 4 weeks+

"Delivering Outstanding Services"



**International Bridges Metropia Mobile App** 

- Interlocal Agreement w/ CRRMA

#### **City Council Meeting**

Tuesday, July 12th, 2016

Strategic Goal #1 – Create an Environment Conducive to Strong, Sustainable Economic Development

"Delivering Outstanding Services"