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DISCLAIMER AND ACKNOWLEDGMENTS

This research was performed by the Center for International Intelligent Transportation Research, a part of the Texas A&M Transportation Institute. The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein.

The research team thanks Ms. Sari Kuri, Coalicion Empresarial Prolibre Comercio (CELC) for her assistance in conducting trade surveys and Mr. John Rippee and Mr. Bob Gray, Secure Origins, a TECMA Group Company, for their assistance with the data sharing and analysis of border crossing activity. In addition the researchers had a great deal of cooperation from the County of El Paso, TX Transit Division and TransCore Corporation for their data analysis work.
INTRODUCTION

Recent budget reductions have negatively affected government funding for transportation projects and other initiatives in the United States. The southern border of the U.S. has not escaped these budget cuts. U.S. financial commitments to build new cross border facilities and add staff to the southern border have been reduced. The reductions in funding not only affect the transportation projects themselves, but also cause adverse impacts upon the entire border crossing community including manufactures, transportation companies, logistics providers, pedestrians, privately owned vehicles, and commercial conveyances by increasing Border Wait Times (BWT). The costs associated with increased BWT impact the entire El Paso–Juarez business community, travelers, and the public. Increased BWT deters economic growth and reduces the ability for El Paso–Juarez to compete with other border communities in Texas, New Mexico, Arizona, and California. It not only affects the quality of life of those individuals and businesses that cross the border but also adds to air quality concerns by increasing truck idling time.

To counteract the reduction in federally provided financial support, the U.S. Congress has authorized Customs and Border Protection (CBP) to enter into certain Public-Private-Partnerships (PPPs) with state, local, and private sector entities. PPPs are partnerships between a public (government) agency and one or more private companies. PPPs can offer public agencies money, technology, information, and data. In regard to the southern border, private companies may provide direct financial support on a reimbursable basis to provide new or enhanced services at Ports of Entry including the additional staff and infrastructure improvements. PPPs can be formed through a simple contract, a non-disclosure agreement, or a “memorandum of understanding,” which notes specific details of the agreement between all involved parties such as the CBP PPP, where improvements of both Border Security and U.S./Mexico trade can be realized through private funding for additional CBP officers and infrastructure improvements (1).

The goals of our research were to look at current PPPs formed in El Paso and to determine if it would be good public policy for TTI to enter into a PPP with a private entity as well as U.S. CBP. TTI is working on a number of fronts with PPPs including a national research project focusing on urban roadway congestion and commute times. This project specifically is focused on researching the formation of PPPs in the El Paso–Juarez border crossing corridor. Building upon past successes that TTI had working with public and private partners while doing research projects focusing on border security, data collection technology, border wait times, and developing “choice models,” this PPP research effort was designed to study where future partnerships could go.
FEDERAL GOVERNMENT INVOLVEMENT WITH PPPS

There have been a number of efforts to form PPPs within the current legal authority of private companies, county and city governments, and the federal government. Previous PPP efforts have been formed as test projects to determine if they will work on a local level. Federal legislators decided to take the formation of PPPs to the next level by codifying efforts to fund Customs Border Protection Officer (CBPO) positions from outside of the agency.

The general feeling in border communities is that the increases in wait time can be attributed to not enough CBPO staffing, so legislation approving the formation of PPPs can be found in Section 560 of the Consolidated and Further Continuing Appropriations Act of 2013 (H.R. 933) located in Appendix A. Initial government support for PPPs came on June 7, 2013, with Senator Cornyn and Senator Kay Bailey Hutchison co-sponsoring the Cross-Border Trade Enhancement Act of 2013 (S. 3279) (2). In addition, on June 22, 2013, Congressmen Henry Cuellar and Michael McCaul, both of Texas, introduced H.R. 5964, the Cross-Border Trade Enhancement Act of 2013. This is the companion bill to the legislation that Senators Cornyn and Hutchinson introduced earlier (2). This bill provides for “alternative financing arrangements for the provision of certain services and the construction and maintenance of infrastructure at land border points of entry and for other purposes” (3).
MAKING THE DECISION TO FORM A PPP

Like most important business decisions, public agencies and private sector entities evaluate the benefits and risks for a project when deciding to join or not to join a PPP. Table 1 lists possible benefits and risks for both private and public entities when entering a PPP.

Table 1. Risks and Benefits Considered When Creating a Public-Private-Partnership.

<table>
<thead>
<tr>
<th>Entity</th>
<th>Benefits</th>
<th>Risks</th>
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<tbody>
<tr>
<td>Public Agency</td>
<td>• Funding for Projects</td>
<td>• Crossing the line of being a publicly funded research organization and competing with the private sector</td>
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<td></td>
<td>• Technology</td>
<td>• Political risk of associating with private business and being accused of “picking winners”</td>
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<tr>
<td></td>
<td>• Data Sharing</td>
<td></td>
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<td></td>
<td>• Information Sharing</td>
<td></td>
</tr>
<tr>
<td>Private Company</td>
<td>• Grants</td>
<td>• Financial risk of being bogged down by bureaucratic rules and regulations</td>
</tr>
<tr>
<td></td>
<td>• Tax Breaks</td>
<td>• Losing flexibility by being tied to slow moving public entities</td>
</tr>
<tr>
<td></td>
<td>• Technology</td>
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<td></td>
<td>• Data Sharing</td>
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<tr>
<td></td>
<td>• Information Sharing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Building stronger relationships for growing business</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Developing mutually beneficial area of exchange between numerous government agencies</td>
<td></td>
</tr>
</tbody>
</table>

The potential outcome of a project for the involved entities, the government, the company, and the community are also evaluated prior to joining a PPP. In the case of the CBP PPP, the potential outcome for the PPP is to improve the economy, the quality of life, and security through cooperation and sharing of resources.

FORMING A PPP

In order to learn more about PPPs, TTI agreed to evaluate the sharing of border crossing data with Secure Origins, a TECMA Group Company. Before this evaluation could move forward there needed to be agreements established with a number of entities who had been involved the Secure Border Transportation project that both TTI and Secure Origins participated in with El Paso County Government, TransCore, and the Federal Highway Administration. Researchers were not able to complete the data sharing agreement within this project’s 6 month time frame, but have obtained the concurrence of the SBT project group to move forward. One of the project’s goals was to evaluate the work needed to share and combine assets (data and technology) to improve the accuracy of BWT data and security information going to CBP. An outcome of sharing data is to let more informed decisions be made to reduce BWT, improve economic growth, and improve quality of life in the region. A secondary goal of evaluating data
collection was to provide data to travel and trade forecasting experts who build statistical modeling, which uses mathematical algorithms for predicting cross border decision making.

Researchers discovered the following issues that need to be addressed in the formation of all PPPs:

- There needs to be a clear definition of what each entity expects from the PPP.
- There needs to be transparency between and within the participating entities.
- All internal concerns need to be disclosed and discussed among partners before entering into a PPP.
- All legal concerns for sharing data need to be agreed to before the actual exchange of information is started.
- There needs to be a trusting relationship established between PPP partners or nothing will happen.

TTI signed a Non-Disclosure Agreement (NDA) with Secure Origins on January 28, 2014. This agreement (found in Appendix B) describes the limits of the relationship between TTI and Secure Origins. Due to several of the above issues and time constraints researchers were not able to analyze the border crossing data by the project’s ending date, February 28, 2014. Discussions continue with representatives from Secure Origins, El Paso County, TransCore, and TTI concerning the sharing of data.

**PHASE II**

Should this project be extended to a second phase, there are a number of data sharing and choice modeling activities remaining. Researchers have a strong potential of resolving the following open issues:

1. El Paso County, Secure Origins, and TransCore could be assured that any evaluation of collected data would be done in accordance with legal needs.
2. Trust could be established between these PPP partners that would permit the data analysis to be used to develop recommendations to CBP for reducing BWT.
3. Choice model experts could review the collected data and see if it was useful for the construction of their border crossing models.

**SUCCESSFUL PPP**

An example of a successful PPP is found in Project 21 at the Southern Port of Entry. Project 21 is a successful partnership between U.S. CBP and the City of El Paso, which established a model commercial port of entry to maximize both homeland security and supply chain efficiencies in an effort to improve economic viability of the region and overall global competitiveness of North America. This PPP allows for sharing between trade partners and customs. Carriers, manufacturers, the U.S. CBP, and other authorized agencies have shared critical aspects of each live shipment, which saves time and money and increases border security.
Although this research on creating a PPP was not completed, the exercise proved beneficial by opening doors between El Paso County, Secure Origins, TransCore and TTI for future opportunities to share data and technology to improve BWT and security at the borders. In addition, researchers were able to begin discussions in October 2013 with Dr. Ipek Sener from the TTI Austin office to develop a choice model to determine why companies choose not to join trusted shipper programs and determine if formation of a PPP for funding and/or education might influence them to join. The research team also entered into discussions with TTI Mobility Analysis Program Researcher, Dr. Don Kang about the possible use of data collected by Secure Origins to be used in conjunction with his established border crossing model now relying on RFID data.

After reviewing initial results from the 2012 Customs-Trade Partnership Against Terrorism, (C-TPAT) survey, Dr. Sener indicated the research team would need to distribute additional surveys to increase the number of responses in order to have enough data for the choice model. The surveys distributed were the same as those done in connection with Center for International Intelligent Transportation Research Project 186043-00005 with the exception of an additional question at the end asking if they had previously taken the C-TPAT survey. The Coalicion Empresarial Prolibre Comericio, (CELC) distributed the additional surveys at two events held in the El Paso–Juarez border region in December 2013 and February 2014. The surveys were distributed to companies involved in the export of goods to and from the U.S. to help determine the need for additional services at ports of entry and to gather information to discover reasoning behind their choice to join or not to join a trusted shipper program. The companies surveyed included: trucking companies, logistics service providers, manufacturing companies, customs brokers, and importers from both the U.S. and Mexico. They were questioned about routes, border wait time, security, shipments, warehousing, certifications, and knowledge of trusted shipper programs. The choice model being developed is based on specific questions from the survey that relate to joining a trusted shipper program. The topics used for the choice model include:

- BWT at Zaragoza.
- BWT at Bridge of the Americas.
- Factors considered when selecting border crossing route.
- Benefits received/benefits expected from membership in a trusted shipper programs.
- Why have you not joined a trusted shipper program?

It appears that the survey data collected was not abundant enough for Dr. Sener to complete construction of her choice model; Dr. Kang stated that he would like to see the data received from Secure Origins to determine if it may be of use in addition to his RFID choice model construction.
CONCLUSIONS

The research team was not able to complete the PPP analysis or build additional choice models in the time given for our project. However, researchers were able to open doors for future partnerships with the public and private sectors. Researchers discovered the following:

- The partnership should provide a benefit for all partners.
- Each partner should clearly identify what they expect to get out of the partnership.
- Trust is vital in the partnership.
- Disclosure of any associations that might have an interest in the partnership is necessary.
- Development of the partnership should be used on long term projects so time constraints do not hinder the formation and progress.
- Partnerships involving financing infrastructure for return on investment are easier to define, since those involving technology or data as the return is more easily defined.
REFERENCES

APPENDIX A. HR933, SEC. 560

H.R. 933, Sec. 560.

(a) Notwithstanding sections 58c (e) and 1451 of title 19, United States Code, upon the request of any persons, the Commissioner of U.S. Customs and Border Protection may enter into reimbursable fee agreements for a period of up to 5 years with such persons for the provision of U.S. Customs and Border Protection services and any other costs incurred by U.S. Customs and Border Protection relating to such services. Such requests may include additional U.S. Customs and Border Protection services at existing U.S. Customs and Border Protection-serviced facilities (including but not limited to payment for overtime), the provision of U.S. Customs and Border Protection services at new facilities, and expanded U.S. Customs and Border Protection services at land border facilities.

(1) By December 31, 2013, the Commissioner may enter into not more than 5 agreements under this section.

(2) The Commissioner shall not enter into such an agreement if it would unduly and permanently impact services funded in this or any other appropriations Acts, or provided from any accounts in the Treasury of the United States derived by the collection of fees.

(b) Funds collected pursuant to any agreement entered into under this section shall be deposited in a newly established account as offsetting collections and remain available until expended, without fiscal year limitation, and shall directly reimburse each appropriation for the amount paid out of that appropriation for any expenses incurred by U.S. Customs and Border Protection in providing U.S. Customs and Border Protection services and any other costs incurred by U.S. Customs and Border Protection relating to such services.

(c) The amount of the fee to be charged pursuant to an agreement authorized under subsection (a) of this section shall be paid by each person requesting U.S. Customs and Border Protection services and shall include, but shall not be limited to, the salaries and expenses of individuals employed by U.S. Customs and Border Protection to provide such U.S. Customs and Border Protection services and other costs incurred by U.S. Customs and Border Protection relating to those services, such as temporary placement or permanent relocation of those individuals.

(d) U.S. Customs and Border Protection shall terminate the provision of services pursuant to an agreement entered into under subsection (a) with a person that, after receiving notice from the Commissioner that a fee imposed under subsection (a) is due, fails to pay the fee in a timely manner. In the event of such termination, all costs incurred by U.S. Customs and Border Protection, which have not been reimbursed, will become immediately due and payable. Interest on unpaid fees will accrue based on current U.S. Treasury borrowing (a) of this section, fails to pay such fee in a timely manner shall be liable for a penalty or liquidated damage equal to two times the amount of the fee. Any amount collected pursuant to any agreement entered into under this subsection shall be deposited into the account specified under subsection (b) of this section and shall be available as described therein.

(e) Each facility at which such U.S. Customs and Border Protection services are performed shall provide, maintain, and equip, without cost to the Government, facilities in accordance with U.S. Customs and Border Protection specifications.

(f) The authority found in this section may not be used to enter into agreements to expand or begin to provide U.S. Customs and Border Protection services outside of the United States.
(g) The authority found in this section may not be used at existing U.S. Customs and Border Protection-serviced air facilities to enter into agreements for costs other than payment of overtime.

(h) The Commissioner shall notify the appropriate Committees of Congress 15 days prior to entering into any agreement under the authority of this section and shall provide a copy of the agreement to the appropriate Committees of Congress.

(i) For purposes of this section the terms:

(1) U.S. Customs and Border Protection services means any activities of any employee or contractor of U.S. Customs and Border Protection pertaining to customs and immigration inspection-related matters.

(2) Person means any natural person or any corporation, partnership, trust, association, or any other public or private entity, or any officer, employee, or agent thereof.

(3) Appropriate Committees of Congress means the Committees on Appropriations; Finance; Judiciary; and Homeland Security and Governmental Affairs of the Senate and the Committees on Appropriations; Judiciary; Ways and Means; and Homeland Security of the House of Representatives.
APPENDIX B. NON-DISCLOSURE AGREEMENT BETWEEN TTI AND SECURE ORIGINS

AGREEMENT FOR NON-DISCLOSURE OF PROPRIETARY INFORMATION

THIS AGREEMENT, effective upon date of latest signature, by and between the Texas A&M Transportation Institute, a Member of The Texas A&M University System, an agency of the State of Texas ("TTI"), having a place of business at 3135 TAMU, College Station, Texas 77843-3135, and SecureOrigins, Inc., having a place of business at 500 W. Overland, Suite 320, El Paso, Texas 79901.

BACKGROUND

Reference is made to recent conversations between representatives of the parties concerning SecureOrigins, Inc. sharing real time GPS information data that they have collected from trucks crossing the border between Texas and Mexico with TTI. The parties would like to continue such discussions and anticipate that disclosure or proprietary information of one or both of them may be mutually advantageous for the purpose of identifying possible uses and collaboration opportunities we could benefit from as part of our research on border wait times.

AGREEMENT

Therefore, for and in consideration of the disclosure of proprietary information ("Information") which includes technical information, software products, business plans, marketing plans, future potential business relationships, and/or financial information originated by or otherwise peculiarly within the knowledge of the Discloser, or other data which the Discloser treats as proprietary, and which is identified in writing as proprietary at the time of disclosure or which, in the case of orally disclosed information, is identified as proprietary at the time of disclosure and is reduced to writing within twenty (20) days thereafter, the Receiver accepts and receives such Information in confidence and trusts, subject to the following terms and conditions:

1.0 DISCLOSURE

1.1 Discloser discloses such Information only for the purpose stated above. Unless otherwise authorized in writing by Discloser, Receiver shall not disclose Discloser's Information to any third party except to attorneys and consultants it employs for purposes of evaluating the Information, nor circulate it within its own organization except to persons with a need to know. All such persons are required to maintain the confidentiality of the Information subject only to the provisions given below. Receiver shall not utilize the Information except for the purpose stated above and shall not reproduce or otherwise duplicate any portion of the Information without the prior written consent of the Discloser.

1.2 Receiver shall not be liable for disclosure to any third party of Discloser's Information if and to the extent that such Information:

1.2.1 Has been published or was otherwise publicly known when disclosed to Receiver;
1.2.2 Was in Receiver's possession free of any obligation of confidence when disclosed to Receiver;
1.2.3 Entered into the public domain through no fault of Receiver after disclosure of it to Receiver;
1.2.4 Was rightfully communicated by a third party to Receiver free of any obligation of confidence after Discloser disclosed it to Receiver;
1.2.5 Was developed by employees or agents of Receiver independently of and without reference to Discloser's Information.
1.2.6 Is released by Discloser to any third party free from any obligation of confidence; or
1.2.7 Is disclosed pursuant to a court or administrative subpoena, order or a request under the Texas Public Information Act.

1.3 Discloser's Information disclosed to Receiver shall be and remain the property of Discloser. All such Information (including copies except for one copy kept for archival purposes only) shall be promptly destroyed, or returned to Discloser upon

OGC approved 7/21/09
Discloser's written request. If destruction is requested, Receiver shall provide written certification of compliance within thirty (30) days of such request.

1.4 Export regulations may apply to further authorized release of Discloser's Information by Receiver. This Agreement does not authorize export of technical data.

1.5 None of the Information provided under this Agreement will include or embody the proprietary information of any third party.

2.0 TERMINATION

2.1 Unless terminated earlier, termination will occur upon expiration of two (2) years from the effective date of this Agreement. This Agreement may be terminated earlier by either party by ten (10) days written notice to the other party. Termination shall not, however, affect these rights and obligations with respect to Information disclosed prior to termination.

2.2 These obligations of non-disclosure shall exist and continue until three (3) years from the date of disclosure of each item of information, notwithstanding the earlier expiration or termination of this Agreement.

3.0 MISCELLANEOUS TERMS

3.1 This Agreement shall not be assigned by either party.

3.2 No license to manufacture, make, have made, reproduce, prepare derivative works, sell, or use, or other authority of any kind under any intellectual property right including, but not limited to, any trademark, patent, or copyright, shall be implied or granted by this Agreement or by conveying of Information hereunder.

3.3 This Agreement shall be subject to and construed in accordance with the laws of the State of Texas. The parties consent to the exclusive jurisdiction of the State of Texas in all matters arising out of or relating to this Agreement and to service of process by certified mail, return receipt requested, at their respective addresses set forth above.

3.4 Each party designates in writing the following employee(s) to receive all Information exchanged pursuant to this Agreement. Any change of individual(s) shall be communicated to the other party in writing:

For: Texas A&M Transportation Institute
Name: Rafael Aldrete, Ph.D.
Position: Senior Research Scientist
Email: r-aldrote@tamu.edu
Phone: (979) 532-3759

For: SecureOrigins, Inc.
Name: Robert Gray, P.E.
Position: Chief Technology Officer
Email: bob.gray@secureorigins.com
Phone: (915) 534-8243

3.5 This Agreement is intended to provide only for the handling and protection of Information. It shall not be construed as a Team-in, Joint Venture, Partnership, or other similar arrangement. Specifically, this Agreement shall not be construed in any manner to be an obligation to enter into a contract, nor shall it result in any claim for reimbursement of costs.

3.6 Neither party makes any representation or warranty regarding the accuracy, completeness or freedom from defects of the Information disclosed or with respect to infringement of any rights, including intellectual property rights of others.

3.7 This Agreement contains the entire agreement, and supersedes all prior and collateral communications and agreements of the parties with respect to the protection of either party's Information disclosed to the other. No change or addition to any provision of this Agreement shall be binding except by a written amendment signed by both parties.

Texas A&M Transportation Institute

SecureOrigins, Inc.

BY: [Signature]
Agency Director
DATE: 1/28/14

BY: [Signature]
President
DATE: 3/14

OGC approved 7/21/09

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