
William J. Brennan, Director
Office of Economics
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423



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RE: Request for Release of 1984-2019 Confidential Carload Waybill Sample

Dear Director Brennan:

Please consider this request for access to the Confidential Carload Waybill Samples from 1984-2018, and for 2019 when it becomes available. This request will make possible academic research on the importance of multimodal transportation for freight movements and economic activity within the US conducted by Simon Fuchs, Assistant Adviser and Research Economist at the Federal Reserve Bank of Atlanta, and Woan Foong Wong, Assistant Professor at the Department of Economics at the University of Oregon. This letter sets out the information required by 49 C.F.R. § 1244.9(e).

The Confidential Carload Waybill Samples (CCWS) are the best data available to enable our academic research on this topic, and it is, to our knowledge, impossible for us to collect these data from other sources. In this letter we will provide the purpose for which access is needed, a description of specific fields that are necessary (as well as pertinent geographic areas), and detailed justification of why specific waybill data are required. We want to note that we are requesting the entirety of the unmasked waybill sample. Most of these fields are necessary for our research project which involves both economic and transportation considerations and the few that are not, do not mandate special programming by the STB.

Before detailing the information required, we want to emphasize that we fully understand and will comply with the confidentiality standards (the three shipper rule, the three-FSAC rule) and subject any research output using these data to the Director of the Office of Economics for confidentiality compliance review.

I. Purpose for which the requested Data are necessary

Our research project seeks to a) build a quantitative multi- and intermodal transportation flow model for freight traffic in the US and b) an economic evaluation of the implementation of the double-stack rail transport technology. The research project for which the the CCWS is necessary has the following three elements:

Multimodal Transportation Model: The first step of the research project is to build and estimate a tractable model of inter- and multimodal freight transport in the US. We will draw on recent theoretical advancements in economics to derive a tractable characterization of the inter- and multimodal routing problem between US locations, taking into account the multimodal transport network as well as the interchange points between different modes of transportation. In order to correctly estimate the model, geographically detailed information about the routes taken are necessary. The specific geographical information required for transportation modelling includes the origin and termination freight stations, interchange/junction points, bridge railroads, actual distances travelled, and rail carrier identification. The Public Use Waybill Sample (PUWS) is insufficient, since the information it contains is too coarse for our purposes--the origin and terminations points are reported by Business Economic Areas, and the interchange points are reported by state. Additionally, the PUWS does not report any data on bridge railroads as well as distances traveled.

Spatial Economic Aspects of Transportation: In the second step, we embed the transportation model into a model of spatial economic interactions between locations in the US. To understand the economic impact of transportation, it is necessary to integrate data on local economic activity with data on cost and revenue measures along the transportation network for each carrier as well as the relevant commodity information (disaggregated by product/industry category).

Economies of scale play a big role in shaping multimodal transportation. The variable cost measure in the CCWS is reflective of economies of scale at the rail carrier level and therefore is crucial to allow us to capture the true economic cost of transportation networks. Additionally, revenue is important to ascertain the actual expenditure in transportation. The split revenue measure in the CCWS includes pick-up, switching, and delivery expenses. These are integral in order to understand the importance of interchange points for the entire network. Both these cost and revenue measures play equally important roles in helping us understand how close this aggregate multimodal transportation system is working to its allocative optimum. It also allows us to estimate the spatially varying impact of different technology costs on the system, like the double-stack rail transport technology. The PUWS is inadequate in that it only reports the total revenue and cost from origin to termination.

Evaluation of Double-Stacking: Finally, the project seeks to determine the local and macro-economic effects of the introduction of the double-stack rail transport technology in the 80s. This analysis requires the data to cover a sufficiently long time frame (1984-2018, and 2019 as it becomes available) as well as the full geographical extent of the US railroad transport network to determine the impact double stacking had on flows, cost and revenues across the network and to account for possible network spillover effect in parts of the transport network that were not directly affected. Again, the PUWS is inadequate since it would not allow us to evaluate the effect of double-stacking both on transportation flows as well as the economic aspects of this transportation improvement.

II. Specific Waybill Data Required

In conclusion, from the previous section, we can see that an enormous number of fields are pertinent to the analysis. The information required includes variables needed to identify with fine geographical precision the totality of the route taken (origin, destination, interchange points, bridge railroads, actual distances travelled, and rail carrier identification), the commodity transported, shipment size, distance, the cost and revenue along the entire route as well as information on the technology of transportation (equipment code, car capacity, weight, as well as other information on the car, etc.).

III. Justification for Data

The CCWS is the best data available for this study, and the collection of these data from other sources is not only burdensome but is likely impossible. The analysis requires the detailed geographical and economic information that can only be obtained in the CCWS dataset and is not readily available in the PUWS, as outlined above. This analysis cannot be completed without access to the confidential waybill sample.

IV. Access to the Waybill Data

We request data from 1984-present. Access to the waybill data will be provided solely to Simon Fuchs and Woan Foong Wong, who will collectively study and prepare the data and generate output from the data to be included in a research report that is to be published both in academic journals and in the policy publication at the Federal Reserve Bank of Atlanta (<https://www.frbatlanta.org/research/publications/policy-hub>). The requestors will request a confidentiality review for these purposes.

V. Confidentiality Representations

Requestors agree to adhere to all the confidentiality requirements set forth at 49 C.F.R. §§ 1244.9(b)(4) and (f) and to execute the usual Confidentiality Agreement associated with release of the CCWS. We have attached our respective vitas to this request for further information.

Sincerely,



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Simon Fuchs

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Atlanta, Georgia 30309, USA
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Updated: July 10, 2020
Citizenship: German
Visa: H-1B
Born: Oct 22, 1987
sfuchs-de.github.io

Positions	Research Economist , Federal Reserve Bank of Atlanta Post-Doc , MOVE at Universidad Autónoma de Barcelona	2019- 2018-19
Education	Ph.D. in Economics, Toulouse School of Economics MPhil European Diploma for Advanced Quantitative Economics, TSE M.S. Economic Theory & Econometrics (M2 ETE), TSE M.S. Economics (M1), TSE B.A. Economics & Politics, University of York (UK)	2018 2014 2013 2012 2011
Visiting Positions	Dartmouth College Visiting PhD Student Sciences Po, Paris Visiting PhD Student	Fall, 2017 Spring, 2017
Research Interests	Primary Secondary	Spatial Economics International Economics, Labor Economics
Working Papers	Is Tourism Good for Locals? Evidence from Barcelona <i>with Treb Allen, Sharat Ganapati, Alberto Graziano, Rocio Madera and Judit Montoriol-Garriga</i> Spoils of War: Trade Shocks & Segmented Labor Markets in Spain during WWI	
Works In Progress	Globalization and Taste Heterogeneity <i>with Konrad Adler</i> Labor Market Dynamics and Sectoral Diversity <i>with Illenin Kondo and Francois de Soyres</i>	
Teaching	TSE: Macroeconomics (Undergraduate, Graduate)	2015-16/2016-17
Scholarships	Job Market Fellowship (IAST) International Economics PhD Fellow (Dartmouth College) Klaus Murmann Fellowship Programme (SDW)	2017-2018 2017 2008-2011
Presentations	2020: NYU-Columbia Trade Jamboree, Dartmouth*, Federal Reserve System Webinar, NBER SI ITI, SEA(scheduled) 2019: UAB*, UPF*, GU Qatar, SMU, U of Virginia, I-85 Macroeconomics [†] , U of Edinburgh, SAET [†] , SMU Conference on Urban and Regional Economics [†] 2018:	

*: *Brown Bag*

†: Conference/Workshop

Joint Central Bankers' Conference[†], U of Tokyo, SED[†], UIUC, USC, CMU, Atlanta Fed, U of Nottingham, Polytechnique, Uni Bonn

2017:

TSE*, Dartmouth, SED (Poster)[†], LSE (Economic History)[†], UCL[†], Sciences Po*

2016:

Melbourne/TSE Workshop[†], TSE*

Refereeing	Regional Science and Urban Economics Quantitative Economics Journal of Applied Econometrics	
Other Experiences	Research Assistance for Thomas Chaney	2014-2017
Academic Visits	Visiting University of Edinburgh	May 2019
Other Activities	Organizer Atlanta Intl Econ Workshop Organizer Federal Reserve System Webinar	2019- 2020-
Skills	Computer: STATA, MATLAB, SAS, L ^A T _E X, Python, R Languages: German (native), English (fluent), French (adv), Spanish (imdt)	

WOAN FOONG WONG

wfwong@uoregon.edu

<https://sites.google.com/site/wongwoanfoong>

EMPLOYMENT

Assistant Professor, Department of Economics, University of Oregon

Fall 2017 - present

AFFILIATES AND PAST POSITIONS

Affiliate Member, CESifo (Center for Economic Studies and Ifo Institute), Munich

2019-present

CES Visiting Scholar, Ludwig-Maximilians-Universität Munich

May - July 2019

EDUCATION

Ph.D. Economics, University of Wisconsin-Madison

2017

Advisors: Robert W. Staiger and L. Kamran Bilir

M.S. Economics, University of Wisconsin-Madison

2013

B.A. Economics with Mathematics Concentration (High Honors), Oberlin College

2009

B.M. Music Composition with Music Theory Minor, Oberlin Conservatory of Music

2009

Diploma in International Baccalaureate, Mahindra United World College of India, India

2004

Malaysian Certificate of Education, Catholic High School, Malaysia

2001

RESEARCH FIELDS

International Economics, International Trade

PEER-REVIEWED PUBLICATIONS

[Should the WTO Require Free Trade Agreements to Eliminate Internal Tariffs?](#) (with Kamal Saggi and Halis Murat Yildiz), *Journal of International Economics*, Volume 118, May 2019, 316-330.

Previously circulated as "Preferential Trade Agreements and Rules of the Multilateral Trading System"

WORKING PAPERS

[The Round Trip Effect: Endogenous Transport Costs and International Trade](#)

Revised and resubmitted to *American Economic Journal: Applied Economics*

-*Sundaran Memorial Prize for Young Malaysian Researchers, World Bank*

[The Role of Non-Discrimination in a World of Discriminatory Preferential Trade Agreements](#)

(with Kamal Saggi and Halis Murat Yildiz)

Revision requested by *Canadian Journal of Economics*

[The Free Rider Effect and Market Power in Trade Agreements](#)

-*Finalist, 2016 Malaysian Young Researcher Prize, World Bank*

[Entrepôt: Hubs, Scale, and Trade Cost](#) (with Sharat Ganapati and Oren Ziv)

WORKS IN PROGRESS

New Export Opportunities and Firm Performance in the presence of a Large State Sector
(with Brian McCaig and Nina Pavcnik)

The Long-Run Relationship between Trade and Growth of Cities (with Bruce Blonigen)

Monopoly on the High Seas: Endogenous Trade Costs (with Sharat Ganapati)

OTHER PUBLICATIONS

[Figuring out the Doha Round](#) (with Gary Clyde Hufbauer and Jeffrey J. Schott), Volume 91, Columbia University Press, 2010.

Media Coverage: [The Economist](#)

AWARDS, GRANTS, AND FELLOWSHIPS

National Science Foundation (NSF) Grant SES-1919290, “The Long-run Relationship Between Trade and the Growth of Cities” (with Bruce Blonigen)	<i>2019-2022</i>
Sundaran Memorial Prize for Young Malaysian Researchers , World Bank	<i>2018</i>
New Junior Faculty Research Award, University of Oregon	<i>2017</i>
Malaysian Young Researcher Prize, Finalist, World Bank	<i>2016</i>
Honored Instructor Award, University of Wisconsin-Madison	<i>2011</i>
Oberlin Alumni Fellowship, Oberlin College	<i>2011</i>
Comfort Starr Prize in Economics, Oberlin College	<i>2009</i>
First Prize, Cleveland Federal Reserve and Akron University Research Poster Competition	<i>2009</i>
Omicron Delta Epsilon, International Honor Society in Economics	<i>2008</i>
Davis United World College Scholarship	<i>2004-2008</i>
Oberlin College Grant Scholarship	<i>2004-2009</i>

CONFERENCE AND SEMINAR PRESENTATIONS

Conference and Workshop Presentations

2020: NBER Conference on International Trade Policy and Institutions[†], West Coast Trade Workshop (University of Hawaii), 2020 CESifo Area Conference on Global Economy[†], Society for the Advancement of Economic Theory Conference (Seoul, Korea)[†]

2019: NBER Conference on Cities, Labor Markets, and the Global Economy*, CIREQ Montreal Macroeconomics Conference (invited), Society for the Advancement of Economic Theory Conference (Ischia, Italy), Urban Economics Association (Philadelphia)*, Mid-Atlantic Trade Workshop (Duke)*, Southern Economic Association Conference (Fort Lauderdale)

2018: Cal Poly Trade Workshop (invited), West Coast Trade Workshop (UC Irvine), New York University Trade Jamboree*, ASSA (Philadelphia, PA), University of Oregon Trade Reading Group, UW Madison Alumni Conference, Institutions Trade & Economic Development InsTED Workshop (Syracuse University), Rocky Mountains Empirical Trade Conference (University of Ottawa), Society for the Advancement of Economic Theory Conference (Academia Sinica), Western Economics Association Conference (Vancouver)

2017: Empirical Investigations in International Trade EIIT Conference (Washington, DC), University of Oregon Trade Reading Group, Southern Economic Association Conference (Tampa, FL)

2016: University of Wisconsin-Madison (Empirical Microeconomics Workshop and Industrial Organization Workshop)

Seminar Presentations

2020: Stanford University, Keynote Speaker at the 20th Annual Nordic International Trade Seminars, University of Virginia, Syracuse University, Indiana University, Hong Kong University, University of Warwick, FREIT Empirical Trade Online Seminar, Ryerson University[†]

2019: University of Cambridge, London School of Economics, University of Mannheim, Ludwig-Maximilians-Universität Munich, University College Dublin, Federal Reserve Board, Georgetown University*

2018: Portland State University, Wilfred Laurier University, Singapore Management University

2017: University of Oregon, Clark University, Iowa State University, University of British Columbia Sauder School of Business, Georgetown University, University of Pittsburgh, Analysis Group Menlo Park, World Bank Development Research Group (Kuala Lumpur)

2016: Dartmouth College Tuck School of Business, University of Wisconsin-Madison

* = presentation by co-author

[†] = delayed/canceled due to COVID-19

TEACHING

University of Oregon, Department of Economics

Graduate: EC 607 Seminar in International Trade (Fall: 2017, 2018; Winter: 2020)

Undergraduate: EC 481/581 International Trade (Fall: 2017, 2018, 2019; Winter: 2018, 2019, 2020)

Undergraduate: EC 311 Intermediate Micro Theory (Winter & Fall 2019)

REFeree ACTIVITY

Academic Journals: Quarterly Journal of Economics, Review of Economics and Statistics, American Economic Review: Insights, World Bank Economic Review, Journal of International Economics, Journal of Urban Economics, International Economic Review, Review of International Economics, B.E. Journal of Macroeconomics, Review of World Economics, Regional Science and Urban Economics, Economic Inquiry

Grant Review: NSF

OTHER PROFESSIONAL ACTIVITIES

Wait & Involve List, Center for Economic Policy Research (CEPR) *Feb 2020*
-To be considered for appointment as CEPR Researcher in 2021

Guest Speaker, University of Oregon Women in Economics Group *Nov 2019*

Organizer, University of Oregon Trade Reading Group *2018-2019, Fall 2019*

Co-Organizer (with Mark Colas and Kegan Tan), UW Madison Alumni Conference *2018, 2019, 2020[†]*

Faculty affiliate, University of Oregon Center for the Study of Women in Society (CSWS), CSWS Women of Color Project, and Asian Studies Program

DEPARTMENT SERVICE

Search Committee, University of Oregon: 2019-2020

Placement Committee, University of Oregon: 2017-2018, 2018-2019

Seminar Committee, University of Oregon: 2017-2018, 2018-2019, 2019-2020

POLICY WORK

[Bridges to Employment](#) (with Gary Clyde Hufbauer), *Real Time Economic Issues Watch*, Washington: Peterson Institute for International Economics, September 26, 2011.

[Revitalizing the Export-Import Bank](#) (with Gary Clyde Hufbauer and Meera Fickling), *Policy Brief 11-6*, Washington: Peterson Institute for International Economics, May 2011.

[Corporate Tax Reform for a New Century](#) (with Gary Clyde Hufbauer), *Policy Brief 11-2*, Washington: Peterson Institute for International Economics, April 2011.

[Figuring Out the Doha Round](#) (with Gary Clyde Hufbauer and Jeffrey J. Schott), Vox-EU.org, February 22, 2010.

[Augmented Misery Index: 2009-2011](#) (with Gary Clyde Hufbauer), Washington: Peterson Institute for International Economics.

[G-20 in the Wake of the Great Recession](#) (with Gary Clyde Hufbauer and Jacob Kirkegaard), Report to the International Chamber of Commerce Research Foundation, September 2010.

[US Protectionist Impulses in the Wake of the Great Recession](#) (with Gary Clyde Hufbauer, Jacob Kirkegaard, and Jared Woollacott), Report to the International Chamber of Commerce Research Foundation, March 2010.

[It is a hopeful scenario, but then all hope for Doha is not lost yet](#) (with Gary Clyde Hufbauer), Commentary on “What Europe should do to save the Doha Round” by Ricardo Meléndez-Ortiz and Trineesh Biswas, *Europe’s World*, spring 2011, 15-19.

PREVIOUS EMPLOYMENT

Research Assistant for Prof. Robert W. Staiger *2012-2017*

Teaching Assistant for Introduction to Microeconomics, Prof. Korinna Hansen *Fall 2011*

[Research Analyst](#) for Senior Fellows Gary Clyde Hufbauer and Jeffrey J. Schott, Peterson Institute for International Economics *2009-2011*

Research Assistant for Prof. Anne O. Krueger, Johns Hopkins University *2010-2011*

Research Assistant for Prof. Alberto Ortiz, Oberlin College *Fall 2008*

Research Assistant for Prof. Kenneth N. Kuttner, Williams College *Summer 2008*

COMMUNITY SERVICE

Summer Academy to Inspire Learning (SAIL) Program, University of Oregon

Program designed for low-income high-school students to encourage college enrollment

Panelist on World Cultures International Panel *2017*

Session Volunteer *2018, 2019*

Volunteer, Oberlin College Admissions Alumni Recruiting Network *2009-present*

OTHER INFORMATION

Citizenship: Malaysia, US Permanent Resident

Languages: English, Mandarin, Malay, Cantonese, and Hokkien/Fujianese