ACRP Problem Statement 18-10-01 **Recommended Funding Amount:** $175,000

Effects of TNCS on Airport Revenues and Operations

ACRP Staff Comments

This topic was noted at the January 2017 AOC meeting and is identified as further research in ACRP Synthesis 84: Transportation Network Companies (TNCs): Challenges and Opportunities for Airport Operators. The estimated budget is not commensurate with typical ACRP research projects for this level of effort; suggest minimum of $250,000.

TRB Aviation Committees Comments

AIRPORT TERMINALS AND GROUND ACCESS COMMITTEE: Supported. This quick response project would provide timely information to airports for near-term decision-making and could reduce the use of anecdotal evidence based on limited data in the decision making process. This research will also establish the degree to which disruption caused by TNCs has normalized and become the "new reality."

AVIATION ECONOMICS AND FORECASTING COMMITTEE: Strong support. This is an important issue, and the proposal is well documented and explained. Suggestion to build on ACRP Synthesis 66: Lessons Learned from Airport Sustainability Plans. This issue is of growing importance to airports as it provides both a new revenue source but also a potential headache with greater infrastructure costs and reduced revenues in other sectors (i.e., parking) that must be considered. It is suggested that the proposed research effort include a case study on specific airport models that have adopted TNCs and not just a general survey.

Association Committee Comments

AAAE (MEMBER): Please accept this problem statement. It's of value and interest to airport operators.

AAAE (MEMBER): Very interested, very urgent and applicable to airports and long-term planning.

Review Panel Comments

Recommended. The proposed research is excellent and extremely applicable, as it focuses on a subject that is finally being felt by airport operators now that the TNC industry has matured and is fairly stable. Ongoing significant challenges at many airports.

AOC Disposition

This problem statement received an average rating of 4.5 points out of a possible 5 points among voting AOC members. There was a desire to get the results of this research done quickly. Initial focus could be on developing strategies for adapting ground transportation programs to reflect TNCs; a second phase could look at incorporating TNCs into long-range facility planning and design. The research should complement that of ACRP Project 01-35 (18-10-01). Approved and funded at $500,000 as ACRP Project 01-35.

ACRP PROBLEM STATEMENT

1. PROBLEM STATEMENT TITLE: EFFECTS OF TNCS ON AIRPORT REVENUES AND OPERATIONS

This research is to be conducted to quantify the effects that Transportation Network Companies (TNCs) are having on non-airline revenues and landside operations at U.S. airports.

2. BACKGROUND

TNCs have become increasingly popular among persons travelling to and from airports. First permitted to operate at any airport in 2014, they are now permitted to operate at more than 90 U.S. airports. However, at most of these airports they were not permitted to operate until after the middle of 2015. Thus, most airports have less than 18 months and many have less than 12 months of experience with TNC operations.

ACRP Synthesis Project 11-03/Topic S03-11 determined that the use of parking and rental cars declined (on a per passenger basis) at airports after TNCs were permitted to operate. This project also found that TNCs are causing declines in the use of taxicabs and shared-ride vans at most airports (again, on a per passenger basis).

While airports receive significant revenue from TNCs, with several airports receiving over $1 million per year, the synthesis project estimated that these revenues are less than the foregone parking revenue at most airports. The research also concluded that the decline in revenues will increase as more passengers use TNCs.

The synthesis project also found that TNCs are increasing the traffic volumes on terminal building curbside roadways and contributing to curbside congestion and delays. Thus, TNCs were found to also adversely affect airport roadway operations.

These findings were based on a limited amount of data since at the time the synthesis project was conducted only a few airports had more than 12 months of experience with TNC operations. Thus, the amount of available before and after data was limited.

Other topics, not addressed as part of the 2016 synthesis project but which could be included in future research include:

- Are TNCs causing an increase in the illegal solicitation of deplaning airline passengers?
- Will airports be affected by the blurring of TNCs with traditional transportation providers and ride share operators?
- How have airports promoted the use of fuel efficient vehicles or alternative fuel vehicles?
- How have airports enforced compliance with ADA regulations?
- How would a decline in the use of taxicabs, parking, or rental cars impacts planned capital improvements?

3. OBJECTIVE

The purpose of this research is to gather before and after data from the many airports having over a year's experience with TNC operations, and to use these data to analyze the effects TNCs are having on non-airline revenues and airport operations. The larger number of airports having data available—compared with the data available when the synthesis project was conducted—should support more detailed analyses of these effects.

4. PROPOSED TASKS

This research would include the following tasks:

A. Determine the airports at which TNCs have been permitted to operate for more than 18 months.
B. Conduct a literature review.
C. Develop a survey plan to successfully gather activity statistics and revenue data from the airports identified in Task A.
D. Implement the survey plan.
E. Determine the effects TNCS have had on companies operating commercial ground transportation and parking at airports nationwide.
F. Analyze the effects of TNCs on airport revenues and operations considering variations in airport size, location, market, and other factors.
G. Propose a method, based upon ground access variables, allowing airports to estimate the changes in future revenues and operating costs considering the airport's size, location, market, and other factors
H. Document the analyses and research findings.

5. ESTIMATED FUNDING

It is estimated that the proposed research can be completed within a budget of $175,000.

6. ESTIMATED RESEARCH DURATION

It is anticipated that the research could be completed within 9 months.

7. RELATED RESEARCH

The research conducted as part of ACRP Synthesis Project 11-03/Topic S03-11 (Transportation Network Companies: Challenges and Opportunities) is directly relevant to this research.

8. PROCESS USED TO DEVELOP THIS PROBLEM STATEMENT

This problem statement was developed based on discussions with and guidance provided by the Project Panel for ACRP Synthesis Project 11-03/Topic S03-11 and research conducted as part of this project.

9. PERSONS SUBMITTING THIS PROBLEM STATEMENT

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