

~REQUEST FOR PROPOSALS~

ON-BOARD TRANSIT SURVEY AND REVIEW

Section I. General Description of Services

The Mid-Ohio Regional Planning Commission (MORPC) is seeking the services of a Consultant/Consultant Team to conduct an On-Board Transit Survey (the Survey) of all fixed transit routes of the Central Ohio Transit Service (COTA) and Delaware Area Transit Agency (DATA) and conduct a rigorous Quality Assurance/Quality Control check of the survey data with respect to the regional travel demand forecasting model. The purpose of the Survey is to provide sufficiently accurate data to calibrate and validate the MORPC's activity-based/tour-based travel demand forecasting model.

A proposed scope of services for the Survey is provided in *Appendix A*. MORPC expects the Consultant to perform all the work within the completion deadlines for each task. The Consultant is expected to provide input in the proposal as to whether and how the proposed scope of work/schedule needs to be modified/changed to achieve the objectives of the study.

Section II. Proposal Contents and Format

Consultants interested in being considered for selection must submit **fifteen (15)** hardcopies and **one (1)** electronic copy in Microsoft Word format of their proposal to the following **by 4p.m. (ET) on October 31, 2007**:

Ahmad Al-Akhras, Ph.D., P.E., PTOE
Assistant Director of Transportation
Mid-Ohio Regional Planning Commission
285 East Main Street
Columbus, OH 43215

The proposal shall follow the format as described in this section. The consultant may include any additional information deemed pertinent. All pages, except preprinted technical inserts, shall be sequentially numbered.

There is no page limitation imposed on the proposal. It is expected that the proposal submitted shall be professional in content and appearance. All description and information provided in the proposal shall be clear, concise and include sufficient data to allow the verification of all claims to meeting the RFP requirements.

MORPC is not liable for any cost associated with the preparation of the proposals or any other costs incurred by any contractor prior to the execution of the contract. All materials submitted in response to

this RFP shall be the property of MORPC and may be returned only at MORPC's option. All materials received shall be considered public information and shall be open to public inspection.

The proposal shall contain the following:

Transmittal Letter/Cover Letter

The cover letter shall list the RFP subject, name of the consultant, and the name, title, address and telephone number of a contact person with authority to answer questions regarding the proposal. The letter shall include the name, title, address and telephone number of a contact person to be notified regarding contractual issues. The letter shall mention any proposed co-venture arrangements or subcontractors.

The cover letter shall be signed by a representative authorized to legally bind the consultant, and shall include an identification of the consultant as a corporation or other legal entity, a statement that consultant has sole and complete responsibility for delivery of the required services, and a statement that the proposal will be valid for 120 days from the proposal submission deadline.

The cover letter shall contain a statement that the contractor meets the DBE requirement.

Executive Summary of the Response to the Proposal

This section shall provide an up-to two-page summary of the consultant's response to the proposal, including the understanding of the Survey, the proposed approach, and the services to be provided. The consultant shall clearly specify its commitment to meet the terms, conditions, and requirements as defined in this RFP, and to perform the work within the anticipated time frame and budget.

Methodology and Work Plan

This section shall demonstrate the consultant's understanding of the scope of work of the Survey, and explain how the team will be managed to deliver the services detailed in this RFP.

In particular, the section shall provide a detailed work plan, including a detailed discussion of each task, the deliverables for each task, and a clear explanation of the consultant's approach for each task. The consultant may suggest alternatives to the proposed tasks and deliverables that improve upon achievement of the Survey objectives, as long as justified in the proposal.

The section shall discuss in detail technical issues according to the nature of the Survey, including but not limited to how to collect "tour" information for the MORPC's activity-based/tour-based travel demand model, accounting for the potential biases, whether or not to offer an incentive to the Survey participants and/or how, and any usage of advanced electronic devices like GPS-based. Any potential problem areas shall be identified and addressed.

The section shall emphasize a clear understanding of the role of Quality Assurance and Quality Control (QA/QC) in the scope of work. An approach to developing a QA/QC plan in Task 1 and incorporating it to each task shall be provided.

The section shall provide a detailed staffing plan with the management organizational chart. The section shall identify the key team members, their responsibilities to each task, and their expected availability. MORPC and the Advisory Committee's role in the Survey and Model QA/QC shall be identified. The section shall also include any assurances to provide the requested services in a responsive and timely manner.

The section shall include a detailed schedule, showing for each task the expected hours, start and end dates, and important milestones. A Gantt-type chart shall be included identifying all tasks and sub-tasks, all deliverables, and time in the scope of work. The section shall provide total person-hours by key personnel and staff category for each task and indicate the percentage of their time that will be assigned to the Survey for the duration of the Survey.

The section shall present an approach to managing resources. If subcontracts are utilized, the section shall include a description of the role of subcontractors and how they will be supervised.

Capabilities and Experience

This section shall provide a brief overview of the breadth and depth of the professional resources of the consultant or proposed consultant team. The consultant shall provide a description of the level of familiarity with central Ohio.

The section shall identify similar work conducted by the team. Do not include consultant work unless the key members who will work on the Survey had substantial participation in the work. A summary of **at least three (3)** surveys similar in subject matter and scope to the Survey shall be included, as well as the clients, and appropriate reference(s) with name(s) and telephone number(s). One survey report, which is comparable to the Survey and prepared by the key team members, shall be provided. Only **one (1)** copy is required, and will be returned after proposal evaluation upon request.

The section shall provide resumes for all key team members, emphasizing the individual's training and experience relevant to the Survey. A general resume is not a satisfactory substitute for this information.

Cost Proposal

This section shall provide a full description and breakdown of the expected cost for the Survey. The proposal shall present a breakdown of hours and expenses by task and subtask, the hourly billing rates for team members, and all non-labor expenses expected to be reimbursed. Total cost shall be indicated, as well as an estimated **cost per complete survey** based on the sample size identified in the work plan.

DBE Compliance

MORPC has a goal that **twelve (12)** percent of the Survey cost/activities be set aside for DBE firms. The consultant should do its best to achieve this goal.

Section III. Consultant Selection Procedure

1. Advisory Committee

An Advisory Committee shall conduct evaluation of proposals. To be considered for awards of this contract, the consultant must receive a minimum of 50 percent of the total possible score from the evaluation of Stage I. This requirement is intended to ensure that a higher-than minimum performance product/service will be received.

2. Stage I Evaluation

Stage I of the evaluation process will include a point scale rating of the mandatory corporate requirements of the RFP. The evaluation will focus on the consultant's overall qualification to perform the Survey. The Advisory Committee shall assign points to the contractor's proposal-based response with respect to each requirement, by using the following criteria:

Criterion	Points
Understanding of the scope of work of the Survey	20
Technical and Management Approach	40
Capabilities and Experience	40
Total	100

3. Stage II Interview/Presentation

After the top consultants (one or a short-listed number) are identified from Stage I, the Advisory Committee will invite them to make a live summarization of its proposal in Columbus, Ohio. The purpose of the presentation is to provide visual and verbal clarification of information presented in the written proposal. All information detailed in the presentation shall have been originally incorporated in the submitted written proposal.

MORPC will contact the consultant's authorized representative to schedule the time, date and location of the presentation. A preset date for the presentation is December 6th, 2007 (Thursday). The presentation shall be limited to 90 minutes: 30 minutes for presentations; 60 minutes for Q&A. Questions will be limited to issues directly related to information in the consultant's proposal, presentation, and RFP.

Clarification from this presentation may cause the Advisory Committee to make adjustments in the rating scores awarded in Stage I.

The consultant must comply at no cost or obligation to MORPC. MORPC shall not be liable for any cost incurred by the consultants in response to this RFP, or any cost incurred in connection with any discussions, correspondence or attendance at interviews/oral presentations or negotiation sessions. A consultant's refusal to make a live presentation as described shall result in the consultant's proposal being withdrawn from consideration for the Survey.

4. Contract Negotiation

Once the top consultant has been identified at Stage II, MORPC will start contract negotiation with the team. Total cost shall be negotiated to **below MORPC's ceiling budget for this contract** (not provided in this RFP) if the total cost proposed is higher. If successful negotiations are not completed within the subsequent 7-calendar-day periods, the second-ranked consultant may be contacted to negotiate a contract with MORPC.

MORPC reserves the right to select or reject any and all proposals in whole or in part received in response to this RFP; to make such selection without interviews or oral presentations; to request additional information; and to negotiate the final terms and conditions of an arrangement with the selected consultant.

Section IV. Communication Restrictions

All questions and comments regarding this RFP shall be submitted in writing by fax or e-mail to the contact person as noted below. All answers and responses will be posted to the MORPC's website at <http://www.morpc.org/web/rfp/RFP.htm> for all to see. Consultants are responsible to periodically monitor the website as no other means of communication will be utilized.

Contact:

Ahmad Al-Akhras, Ph.D., P.E., PTOE
Assistant Director of Transportation
Fax (614) 621-2401
E-mail: alakhra@morpc.org

Appendix A. Proposed Scope of Services for On-Board Transit Survey

Introduction

The Mid-Ohio Regional Planning Commission (MORPC), the Metropolitan Planning Organization for central Ohio, is requesting written proposals from consultants to conduct an on-board transit survey (the Survey) of all fixed transit routes of the Central Ohio Transit Service (COTA) and Delaware Area Transit Agency (DATA) and conduct a rigorous Quality Assurance/Quality Control check of the survey data with respect to the regional travel demand forecasting model. The purpose of the Survey is to enhance the MORPC's activity-based/tour-based travel demand forecasting model.

The MORPC's activity-based/tour-based travel demand forecasting model was estimated based on a 1999 Household Interview Survey combined with COTA's 1993 on-board transit survey to enrich the data set for the mode choice model estimation. However, the 1993 on-board survey is not representative of current travel patterns, either by access mode, by market segment or workplace distribution, and as such, a new on-board transit survey is critical for the development of future transit forecasts.

The Survey will provide sufficiently accurate data to re-calibrate and validate MORPC's new activity-based model, mainly the mode choice model component. The implementation of the Survey will ensure that the model produces accurate patronage and user benefits forecast for all market segments.

Scope of Services

This section provides a proposed scope of services. The consultant may suggest alternatives to the proposed tasks and deliverables that improve upon achievement of the Survey objectives, as long as justified in the proposal.

Task 1. Work Program

A start-up meeting between the Advisory Committee and the Consultant will be scheduled to finalize the work program for the Survey. A detailed plan will be developed for each task, identifying specific products, schedules, and Quality Assurance and Quality Control (QA/QC) measures. In this task, the Consultant with the Advisory Committee will identify and agree upon the data needs from the Survey, focusing on the understanding the travel patterns and key characteristics of current riders as well as the needs of the MORPC travel demand model.

- Task 1 Deliverables:*
- *Work program, with specific products and schedules*
 - *A QA/QC Survey Plan*
 - *A technical memo detailing the data needs from the Survey*

Completion Deadline: Jan 18, 2008

Task 2. Survey Sampling Plan

The Consultant will develop a Survey Sampling Plan. The Survey shall include all fixed transit routes of COTA and DATA and focus on weekday only. Total average weekday ridership is about 50,000 for COTA, and less than 50 for DATA. A COTA route map is provided in Appendix B, while a detailed breakdown of average weekday ridership by COTA route in May 2006 is given in Appendix C.

In the proposal, the Consultant shall provide a sample size estimate to control the sampling error to a desirable level for the MORPC's model update. Some of the routes do not have high ridership, but they must be included in the sampling plan. The estimated sample size shall be used to develop the cost proposal.

Special considerations must be given to capture all travel markets that the transit system carries and ensure that all those markets are represented adequately in the completed dataset. Example markets that are easily misrepresented include university student patrons and park-and-ride patrons.

The sampling plan shall be designed to account for the known biases encountered in other on-board surveys, and develop measures to minimize those biases. In particular, approaches to identifying and correcting for non-response biases shall be developed. Potential reasons for differential non-response rates include education levels, literacy rates, seat availability on the bus, the riding time sufficiency on the bus, etc. The Consultant shall specify measures to mitigate against low response from low-income patrons and those making short trips. The Consultant shall at least use counts of boarding and alighting by stop and counts of cars in formal park-and-ride lots for the control of the differential response rates. COTA has equipped all buses with APC and AVL devices.

- Task 2 Deliverables:*
- *Survey Sampling Plan*
 - *A technical memo documenting the development of the sampling methodology*

Completion Deadline: Feb 8, 2008

Task 3. Survey Questionnaire

The Consultant will design the Survey questionnaire based on the data needs identified in Task 1. The questionnaire shall be easy-to-follow with clearly worded and simple questions. Emphasis shall be placed upon how to collect "half-tour" information for the MORPC's activity-based/tour-based travel demand model.

The coding scheme for response choices/answers shall be developed to facilitate the data entry and processing.

Multiple questionnaires with different layouts and question wordings shall be designed for the testing in the Pilot Survey in Task 5.

The Consultant shall investigate the necessity of using languages other than English in the Survey.

Data collection methodology (questionnaire distribution and collection) shall be determined in this task. Additional consideration shall be given to increase the response rate and assure the completeness of the returned questionnaire.

- Task 3 Deliverables:*
- *Multiple self-coded questionnaires*
 - *A survey codebook describing data coding procedures*
 - *A technical memo documenting the development of the questionnaire and detailing the data collection methodology*

Completion Deadline: Mar 7, 2008

Task 4. Survey Management

The Consultant shall develop and conduct a survey management plan that accounts for personnel training, and other survey administration requirements.

In this task, surveyors shall be recruited if necessary. Proper training will be given to the surveyors. A surveyor's manual shall be prepared, describing the surveyor's job, from administrative matters through safeguarding of data and courtesy to the public.

All the equipment and supplies for the field work shall be procured.

- Task 4 Deliverables:*
- *A Survey Management Plan*
 - *A Surveyor's Manual*
 - *Train Surveyors*
 - *Procure all equipment and supplies for the field work*
 - *A technical memo documenting this task*

Completion Deadline: Apr 4, 2008

Task 5. Pilot Survey

A small pilot will be conducted using actual surveyors. The Consultant shall test the multiple questionnaires designed in Task 3. The results from this pilot survey will be tabulated and scrutinized for potential biases that were not accounted for in Task 2. The Consultant and Advisory Committee will meet to discuss the results of the survey and develop additional design changes to ensure that the final

survey will provide quality results. . The survey instrument will be finalized based upon the Pilot Survey results. The surveyors may be retrained as appropriate based on the pilot survey results.

- Task 5 Deliverables:*
- *Pilot survey dataset delivered in electronic format*
 - *Make appropriate modifications to the questionnaire and overall survey methods*
 - *Retrain surveyors as appropriate*
 - *A technical memo documenting the pilot survey procedure, results, evaluation, and modifications made to the survey*

Completion Deadline: Apr 18, 2008

Task 6. Survey

The full survey will be conducted according to the survey procedures finalized in Task 5. As survey assignments are returned from the field, the Consultant will ensure that the work was successfully completed and that all survey materials were returned.

Complete work will be reviewed daily to identify surveyors with problems. Surveyors that perform below expected levels of accuracy will be individually retrained. Surveyors who consistently produce faulty work will be dismissed.

- Task 6 Deliverables:*
- *Survey forms returned from the field*
 - *Daily survey progress reports*
 - *Retrain surveyors if necessary*

Completion Deadline: May 22, 2008

Task 7. Data Entry and Processing

Returned survey forms will be immediately sorted and organized as soon as an assignment is completed and checked by the surveyor supervisor. From that point, all survey records will be entered into an electronic database, where the data will go through checking, cleaning, and tabulating procedures. Origins and destinations will be geo-coded to addresses if possible or to TAZs if address data are not sufficiently detailed.

- Task 7 Deliverables:*
- *Organize returned survey forms*
 - *Enter the survey records into an electronic database*
 - *Geo-coding to at least TAZ level*

- Completed Survey forms delivered in a pdf format

Completion Deadline: Jun 13, 2008

Task 8. QA/QC Procedure and Analysis and Model Review

All entered data will go through a QA/QC procedure. The data shall be checked for logic and consistency in the answers. The check may include but is not limited to whether transfers made sense based on the routes involved, the consistency of trip direction, distance, speed with O&D locations and transit route information.

The survey data will be assigned to the MORPC's travel demand forecasting model and the results will be analyzed for the ability of the trip to be assigned. The model's transit skimming procedures will be evaluated as to whether Origin-Destination paths are matching the survey results. The analysis should be based on a disaggregate comparison of individual survey trips against travel model path-building results. Checks should include, at minimum, an analysis of the frequency with which the path-builder is able to build observed survey paths, as well as comparison of path characteristics (number of transfers, types of transit modes used in the path, such as local bus, express bus, etc.).

Once the inconsistencies are resolved and the data are cleaned, sample data will be weighted. Expansion factors will be calculated and applied to survey records to provide an estimate of the total population of boardings for the survey days.

Task 8 Deliverables:

- *Cleaned survey results in electronic format with all variables needed for the calibration and validation of the MORPC travel demand forecasting model*

Completion Deadline: Aug 30, 2008

Task 9. Final Report

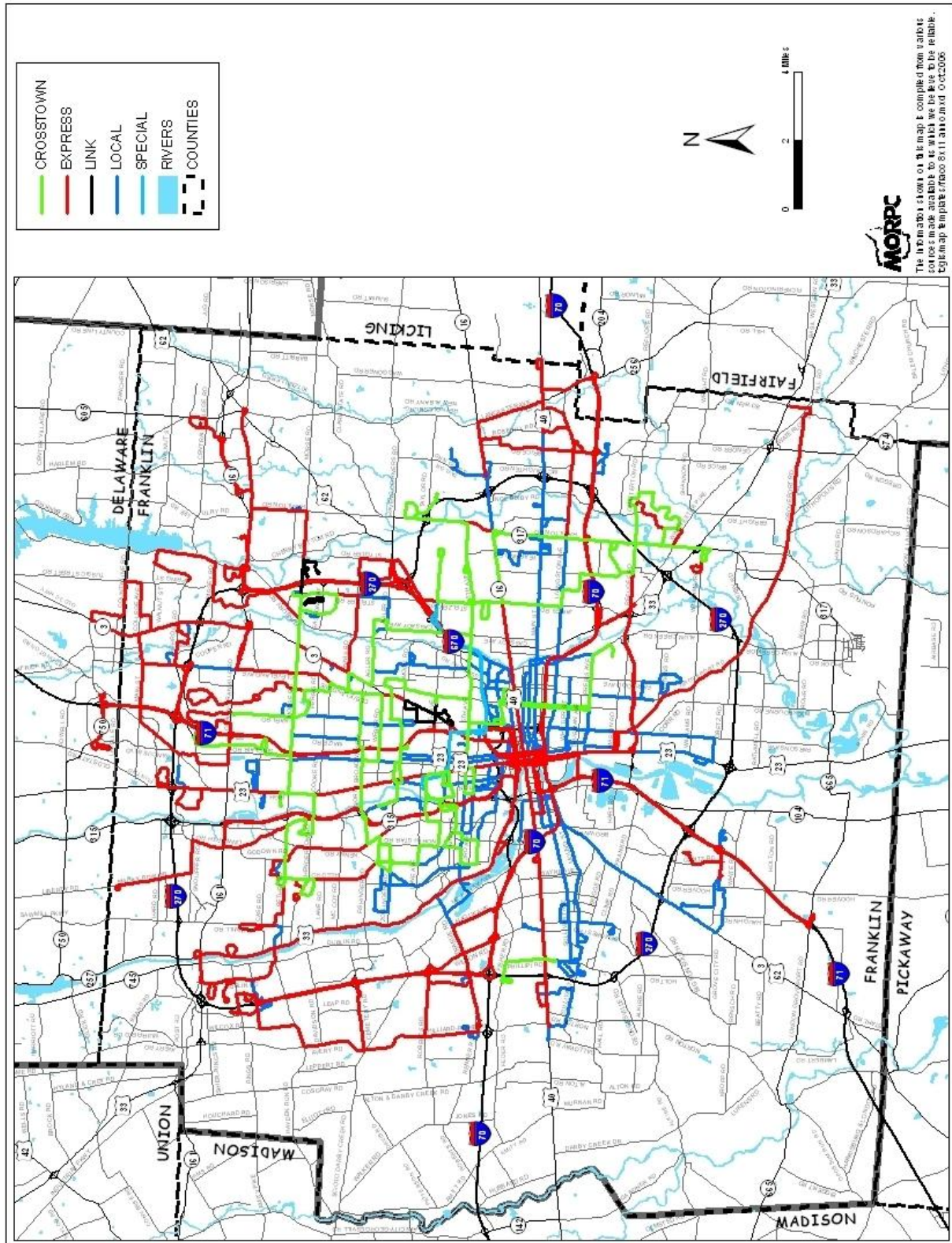
The Consultant will prepare a draft final report, documenting each element of the Survey and presenting the survey findings. The final report is expected to be two volumes with volume one containing data findings summary report and volume two containing cross-tabulations and data tables. The Advisory Committee will review the survey findings and provide comments. A final report and datasets will be delivered for the use of upgrading the MORPC's travel demand forecasting model.

Task 8 Deliverables:

- *A final report*
- *Survey datasets ready for upgrading the MORPC's travel demand forecasting model*

Completion Deadline: Sept 30, 2008

Appendix B. COTA Route Map



Appendix C. COTA Ridership by Route, May 2006

	Route			Weeday			
	No	Name	Average	No	Name	Average	
L o c a l	1	Cleveland/ Livingston	7177	29	Polaris	29	
	2	E Main/ N High	9876	30	Smoky Row	81	
	3	Northwest/ W Mound	1461	31	Wrightington	273	
	4	Indianola/ Parsons	2526	33	North Central	16	
	5	W Fifth	777	34	Karl Road	93	
	6	M. Vernon/ Sullivan	2910	35	Tamarack	52	
	7	Neill/ Whittier	2402	36	Annehurst	111	
	8	Frederick/ Hamilton	3268	37	Westerville	177	
	9	Leonard- Brentnell	870	38	North east	23	
	10	E Broad/ W Broad	6159	39	New Albany	40	
	11	Oak- Bryden/ St. Clair	1403	40	New Albany Bus. Pk	18	
	15	Grove City	477	41	Gahanna	58	
	16	Long St- Easton/ S High	2603	43	E Broad St	26	
	18	Kenny Rd	839	44	N Reynoldsburg	57	
	19	Arlington- Grandview	139	45	Reynoldsburg	101	
	69	US33- Grandview	11	46	Eastland	56	
E x p r e s s	47	Brice Rd	212	51	ODOT- ODPS	5	
	49	Southeast	35	53	Lincoln Village	34	
	54	London- Groveport	24	56	Tuttle	43	
	57	Hilliard	33	58	Dublin	204	
	60	Arlington	23	61	Kenny Rd	124	
	64	Grove City	100	67	East Hilliard	36	
	74	Linden	86				
	C o m m u n i t y	81	Hudson- Ohio	858			
		83	Oakland- Weber	331			
		84	OSU- Arlington- Grandview	398			
		87	Agl er- Cassidy	213			
		89	Hamilton Rd	1055			
		92	James Rd	1127			
		95	Morse- Henderson	652			
		96	Fifth Ave	228			