CrowdGauge
Results

The planning team used an online engagement platform called CrowdGauge to solicit priorities and attitudes about planning tradeoffs pertaining to the transportation issues and budgetary choices addressed in the Long Range Transportation Plan. The platform can be found at the following URL: **http://noaca.crowdgauge.org/**. The results reported here are from a one-and-a-half month period from mid-September to the end of October 2016. There were 656 responses recorded during this time.

HOW DOES CROWDGAUGE WORK?

Step 1: Priorities

CrowdGauge first asked users to identify their priorities for the future. Priorities were described in the form of a list of present-tense statements describing attributes of a regional transportation system. This enabled users to consider each statement from the perspective of either wishing to preserve a current attribute of the system or to describe an ideal future condition. Users gave anywhere from zero to five stars to the priorities they valued most. A dynamic display of icons shifted with the user's scoring of each statement, yielding a composite, icon-based visualization of their individual priorities.

Step 2: Projects and Policies

After stating their priorities, users then chose specific projects and policies given a limited budget. Projects cost money while policies did not. At the top of the screen, users had the option to increase or decrease their budget, which correlated to an increase or decrease of tax rates—more money meant more choices, but it also meant higher taxes. As projects and policies were selected, the colors of the priority bubbles changed to reflect the impacts of a given choice on each priority. Blue meant that a given choice had a positive impact on the priority in question, while green indicated a negative impact. Clicking on the priority bubble showed a written explanation of how the project or policy affected that specific priority, providing an opportunity for the user to learn about the consequences of their choices. The user's selection of priorities, projects, and policies collectively indicated their overall attitudes and choices regarding regional transportation planning and investment trade-offs.

PRIORITIES RESULTS

Two major themes emerged from the priorities rankings: 1) reinvesting in existing infrastructure before building new, and 2) the desire for non-automobile based forms of transportation, i.e., transit, walking, bicycling, etc. Mitigating traffic congestion and improving access to the highway system had relatively low scores.

Priorities by county were varied. Cuyahoga County placed a high emphasis on transit accessibility, whereas none of the other counties put this in their top 3. Maintaining infrastructure in good condition was not only the highest ranking priority across the region, it also scored highly in each of the counties individually. County priorities generally matched overall regional priorities, with the exception of highway access: as mentioned, this was a low priority for the region overall, but it was a high priority for respondents in Lake and Medina counties.

Ranked Priorities

Priority	Total stars	Average stars per user
Our infrastructure is in good condition	2,110	★★★☆☆
Children can safely walk or bicycle to schools and neighborhood parks	2,057	★★★☆☆
I have safe and convenient access to the transit system	2,034	★★★☆☆
It is safe, fast, and convenient for me to travel to places of employment	1,905	★★★☆☆
I have safe and convenient access to bicycle and pedestrian transportation options	1,840	★★★☆☆
My daily transportation costs are within my means	1,818	★★★☆☆
Bicycles and pedestrians can safely share the roads with cars	1,697	★★⯪☆☆
Our transportation system does less harm to the environment	1,616	★★⯪☆☆
I have safe and convenient access to the interstate system	1,412	★★☆☆☆
Traffic congestion is no longer an issue	1,336	★★☆☆☆
There is less government spending	746	★☆☆☆☆

Priorities By County

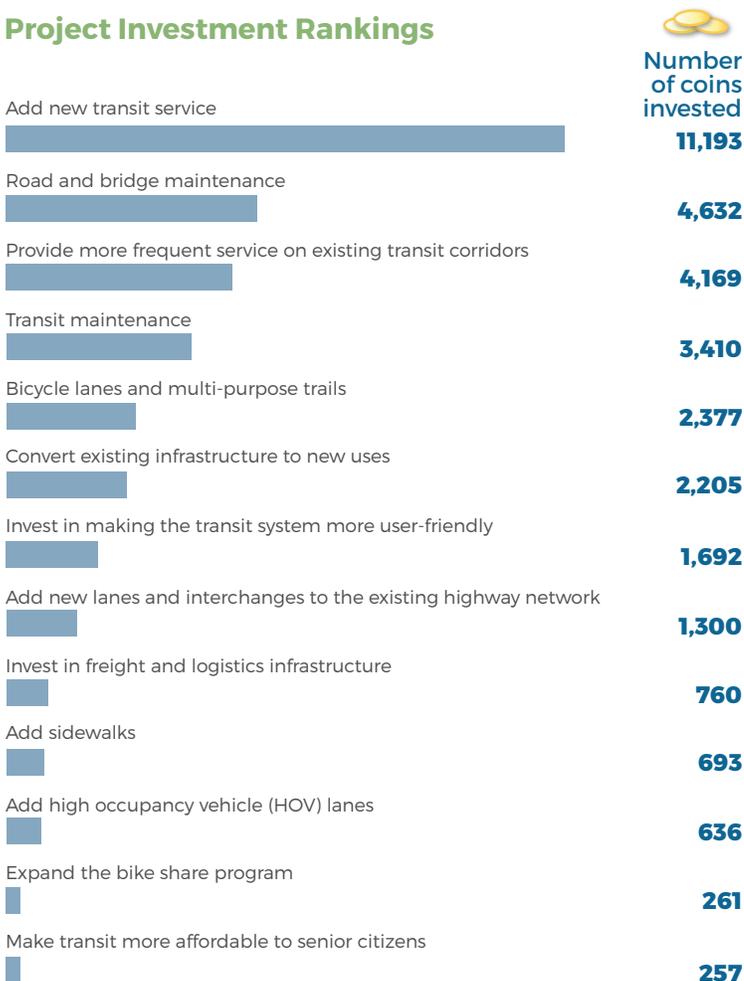| Lake ① Medina ① Lorain ② Cuyahoga ③	Geauga ① Cuyahoga ② Medina ③	Lorain ① Lake ③	Geauga ② Lorain ③	Lake ② Medina ②	Cuyahoga ①	Geauga ③
Our infrastructure is in good condition	Children can safely walk or bicycle to schools and neighborhood parks	It is safe, fast, and convenient for me to travel to places of employment	My daily transportation costs are within my means	I have safe and convenient access to the interstate system	I have safe and convenient access to the transit system	I have safe and convenient access to bicycle and pedestrian transportation options

PROJECTS AND POLICIES RESULTS

The most popular project category, by a significant margin, was adding new transit service. The top 5 were heavily focused on adding new transit service or reinvesting in existing transportation infrastructure. Building new roads and highways ranked as a relatively low priority.

One issue to note is the difference between cost-based rankings versus frequency-based rankings. Here we have provided both: the project categories are ranked by the overall number of coins they received, which is meant to simulate regional sentiment about budget allocation toward different project types, whereas the specific projects are ranked by their frequency of selection, indicating popularity of a specific initiative independent of cost. Each paints a partial picture, and it is important to look at both. For example, sidewalks received a relatively low portion of users' coin allocations, despite the fact that having pedestrian options scored high among the priorities. This is, however, offset, by the fact that the specific project of "adding 60 miles of sidewalk" was one of the most commonly selected. The most reliable interpretation of this data is to look at projects that rank similarly across both dimensions: projects types that ranked high on both can be deemed popular regardless of cost and vice versa.

Project Investment Rankings

Number of coins invested

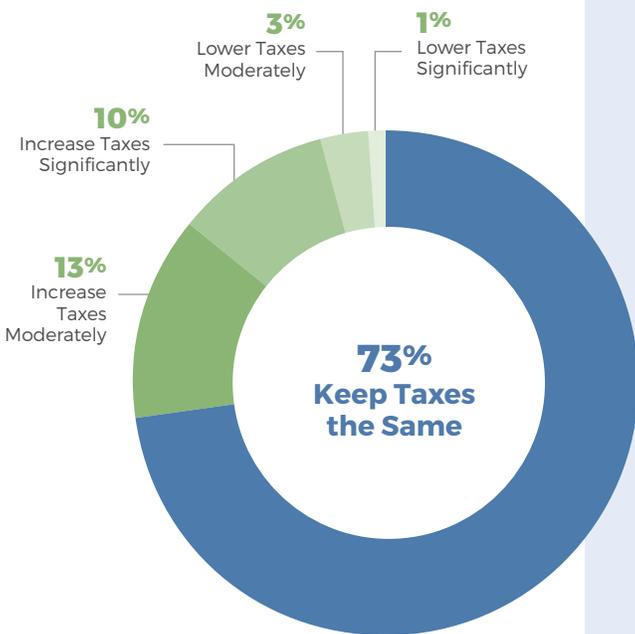| Project	Number of coins invested
Add new transit service	11,193
Road and bridge maintenance	4,632
Provide more frequent service on existing transit corridors	4,169
Transit maintenance	3,410
Bicycle lanes and multi-purpose trails	2,377
Convert existing infrastructure to new uses	2,205
Invest in making the transit system more user-friendly	1,692
Add new lanes and interchanges to the existing highway network	1,300
Invest in freight and logistics infrastructure	760
Add sidewalks	693
Add high occupancy vehicle (HOV) lanes	636
Expand the bike share program	261
Make transit more affordable to senior citizens	257

Individual Project Selections

Project	Times Selected
Restore recently cut bus and rapid transit services	371
Improve GPS tracking on buses and trains	278
Add 30 miles of new bus service	264
Add 30 new bike share stations	261
Add 60 miles of sidewalk	260
Increase senior fare discount by 50%	257
Add 30 miles of on-street bicycle lanes	257
Add 30 new bus shelters	252
Replace 30 buses	212
Convert 30 miles of underutilized railways to bike and pedestrian trails	201
Convert 30 miles of underutilized road for bicycle and pedestrian use	200
Add 30 miles of separated bicycle lanes	200
Add 30 miles of sidewalk	173
Convert 30 miles of existing lane miles to HOV	168
Add 5 miles of new bus rapid transit	146
Add 30 miles of off-road multi-purpose trails	144
Repave 30 miles of four-lane road	130
Reduce average bus and train wait times by 25%	113
Add 5 miles of new rapid transit	103
Replace 30 train cars	102
Repave 60 miles of four-lane road	97
Add 5 miles of new cross-county intercity commuter rail	96
Replace 30 miles of track	86
Introduce a new fare and ticketing system	83
Add 30 miles of new circulator bus lines	69
Repair 30 four-lane bridges	68
Double evening and weekend transit service	66
Build 5 new highway interchanges	38
Eliminate 5 at-grade train crossings	30
Mitigate 5 truck or train related freight choke points	20
Add 30 new HOV lane miles	18
Reduce average bus and train wait times by 50%	16
Add 30 new miles of four-lane road	7
Add 60 new HOV lane miles	4

PROJECTS AND POLICIES RESULTS

Most of the policies received positive reactions. The only policy that had a strongly negative reaction was "prioritize investment in building new roadways before maintaining existing ones." Like the projects, reinvesting in existing transportation infrastructure proved to be very popular. Even some of the lower ranked policies still had strongly favorable reactions, with nearly all policies receiving as many as 5 times as many thumbs up versus thumbs down votes.

As mentioned previously, users also had the option of adjusting their budget by using a tax slider. Most users (73%) chose not to change their starting budget. Among those that did, the majority indicated a willingness to raise taxes to fund additional projects.

Budget and Taxation Choices

- 3% Lower Taxes Moderately
- 1% Lower Taxes Significantly
- 10% Increase Taxes Significantly
- 13% Increase Taxes Moderately
- 73% Keep Taxes the Same

Policy Responses

Policy	👎	👍
Prioritize investment in existing roadways before building new ones	20	366
Encourage new employment centers to locate near existing transit corridors	24	353
Enhance transit system coordination between counties	21	347
Require cost/benefit analysis for projects stated to have an economic benefit	30	317
Create design standards that require complete streets in new developments	39	302
Require developers to pay for and maintain new roads and interchanges that primarily serve their projects	62	293
Encourage new housing developments to locate near existing transit corridors	62	288
Prioritize investment in new or upgraded transit before building new roads	46	286
Require green infrastructure in new transportation projects to mitigate environmental impacts	61	286
Make more transportation funds available to local governments	56	278
Prioritize transportation investment in low income and historically marginalized communities	76	277
Prioritize investment in building new roadways before maintaining existing ones	262	45