# Transportation Committee

For the Metropolitan Council meeting of January 22, 2020

**Subject:** Alerts-Manager and Real-time Concentrator Software, Contract 19P218

## Proposed Action

That the Metropolitan Council authorizes the Regional Administrator to negotiate and execute a sole source Contract 19P218 with IBI Group to provide software implementation, support and maintenance services for an Alerts Manager and Real Time Concentrator system for a three-year period in an amount not to exceed $800,000.

## Summary of Committee Discussion/Questions

Metro Transit Project Management Specialist Bre Grand and Transit Information Assistant Manager Ben Rajkowski presented this item. Chair Barber asked about posting service suspensions on real-time signs. Grand answered that gaps have been identified in the current process and are being addressed through this business item.

Motion by Council Member Cummings, seconded by Council Member Chamblis. Motion carried.

## Transportation Committee

Meeting date: January 13, 2020

For the Metropolitan Council meeting of January 22, 2020

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| **Subject**: Alerts-Manager and Real-Time Concentrator Software, Contract 19P218 |
| **District(s), Member(s):** All |
| **Policy/Legal Reference:** 3-3 Expenditure Policy, Procurement of Goods and Services greater than $500,000. |
| **Staff Prepared/Presented:** Wes Kooistra, General Manager, 612-349-7510 <br> Bruce Howard, Director, Marketing and Transit Information, 612-349-7694 <br> Ben Rajkowski, Assistant Manager, Transit Information, 612-349-7397 <br> Bre Grand, Project Manager, Transit Information, 612-349-7355 |
| **Division/Department:** Metro Transit/Transit Information |

### Proposed Action

That the Metropolitan Council authorizes the Regional Administrator to negotiate and execute a sole source Contract 19P218 with IBI Group to provide software implementation, support and maintenance services for an Alerts Manager and Real Time Concentrator system for a three-year period in an amount not to exceed $800,000.

### Background

Metro Transit currently uses an internally developed alerts management tool for updating riders about detours and other transit service disruptions. Customers can sign up to receive alerts for individual routes by text and email; at the end of 2019, Metro Transit had over 34,000 subscribers signed up for rider alerts. Metro Transit also uses other tools and platforms to communicate certain service alerts, such as social media and electronic signs which are updated as needed.

Additionally, Metro Transit currently publishes a weekly data feed with schedule and other transit information that is reflected in the online trip planner and other customer information tools. Metro Transit does not currently publish a dynamic, real-time feed to reflect and reconcile service changes or disruptions (such as a temporary bus stop closure or route detour) and real-time bus/rail location data. The impact to riders is that service changes are not always reflected in the tools being used to plan and make transit use decisions.

Metro Transit seeks to enter into a contract with IBI Group that will implement Alerts Manager and Real-time Concentrator software to more effectively create, manage, and send information about detours and disruptions to downstream customer information channels and to produce an accurate, robust real-time data feed to incorporate alerts and other real-time information into trip planning and other tools, and improve overall real-time transit information accuracy. A sole source procurement is requested for this software as IBI Group is the only vendor who can meet the Council's requirements.

### Rationale

The proposed improvements associated with the software will impact potentially all customers. Providing accurate and timely information about detours and disruptions and estimated departure times has become an expectation for riders.

The Alerts Manager and Real-time Concentrator systems will allow Metro Transit to provide more accurate, detailed, and relevant real-time information to riders and promote transit use and mode choices through:

- Implementing a system that streamlines and improves the creation, management and timeliness of rider alert messages to various customer information channels (such as the Metro Transit website, trip planner, electronic signs)
- Creating more granular alert subscription options, allowing customers to receive alert messages that more directly impact them
- Integrating bus, Northstar and light rail data into a cohesive data feed
- Publishing a real-time feed that other third-party transit apps (such as Google) can also use to share real-time rider alert, vehicle location and estimated departure time information
- Improving the ability to manage, report on and utilize rider alert data

## Thrive Lens Analysis
This action will advance the Thrive outcome of prosperity and livability by providing more accurate real-time information about existing transit operations that allows riders to make better-informed choices about their transit use and encouraging the overall use of transit. It will be an improvement for all transit users in our communities, promoting the general livability of the region.

## Funding
Funding for this contract is included in the Transit Information department budget.

## Known Support / Opposition
This project is part of a Metro Transit high-priority initiative program to Improve Detour Communication and has significant internal support. There is currently no known opposition.

# Real-Time Customer Information Improvements:
## Business Items 2020-12 & 2020-9
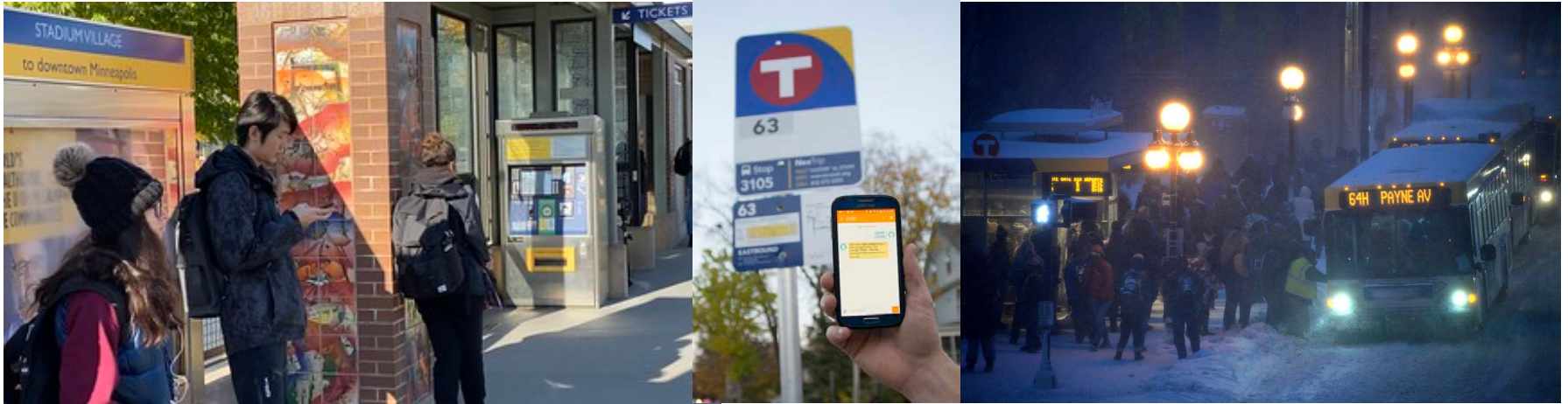
**Bruce Howard**, Director, Marketing and Transit Information

**Ben Rajkowski**, Assistant Manager, Transit Information

**Laura Matson**, Program Manager, Real-Time Customer Information

**Bre Grand**, Project Manager, Transit Information

# Customer Information Vision

It is easy for diverse customers to understand where and when transit service operates because Metro Transit provides information that is **accurate**, **customer-friendly**, **accessible**, **robust**, and **professional**.

**Today**: Focus on meeting customers' expectations by improving real-time information

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# Customers Depend on Real-Time Information

- NexTrip
  - 80 million unique, trackable requests per year
  - Plus, over 200 real-time signs and annunciators, other apps and tools
- Rider Alerts
  - Over 34,000 subscribers
  - Over 21,000 unique alerts sent out in 2019
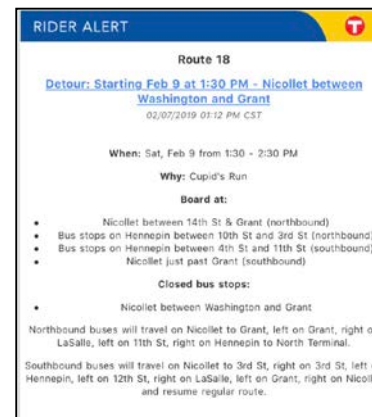
# Real-time Information Challenges

- Major sources of customer complaints about information
  - Missing detour/disruption information
  - Inaccurate and incomplete NexTrip predictions

- Second lowest rated item in 2018 customer survey: "I can find the information I need about detours"

- Alerts and real-time info are not available in most popular customer information tool: Google Maps

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# Business Items

- **2020-12**
  - **Real-Time Prediction Engine**: Improve the accuracy, reliability, and availability of NexTrip predictions for bus service and Northstar

- **2020-9**
  - **Alerts Manager**: Streamline process for creating alerts; allow customers to receive more relevant, customized alerts; publish alerts in industry standard format
  - **Real-Time Concentrator**: Reconcile service alerts and real-time predictions so information is accurate and complete

# 2020-12: Real-time Prediction Engine

## NexTrip Background

- 2008: Metro Transit on leading edge
- Customer expectations and technology have changed
- Prediction accuracy ~65-75% "acceptable" – deteriorates when there are delays, when customers need it most
- Not in industry standard format, not available in Google

# 2020-12: Real-time Prediction Engine

## Approach

- Pilot two prediction engines
- Evaluate predictions alongside current system
- Identify best source for accurate predictions

### Accuracy by Day

Source: TM, NexTrip, Cambridge, Swiftly
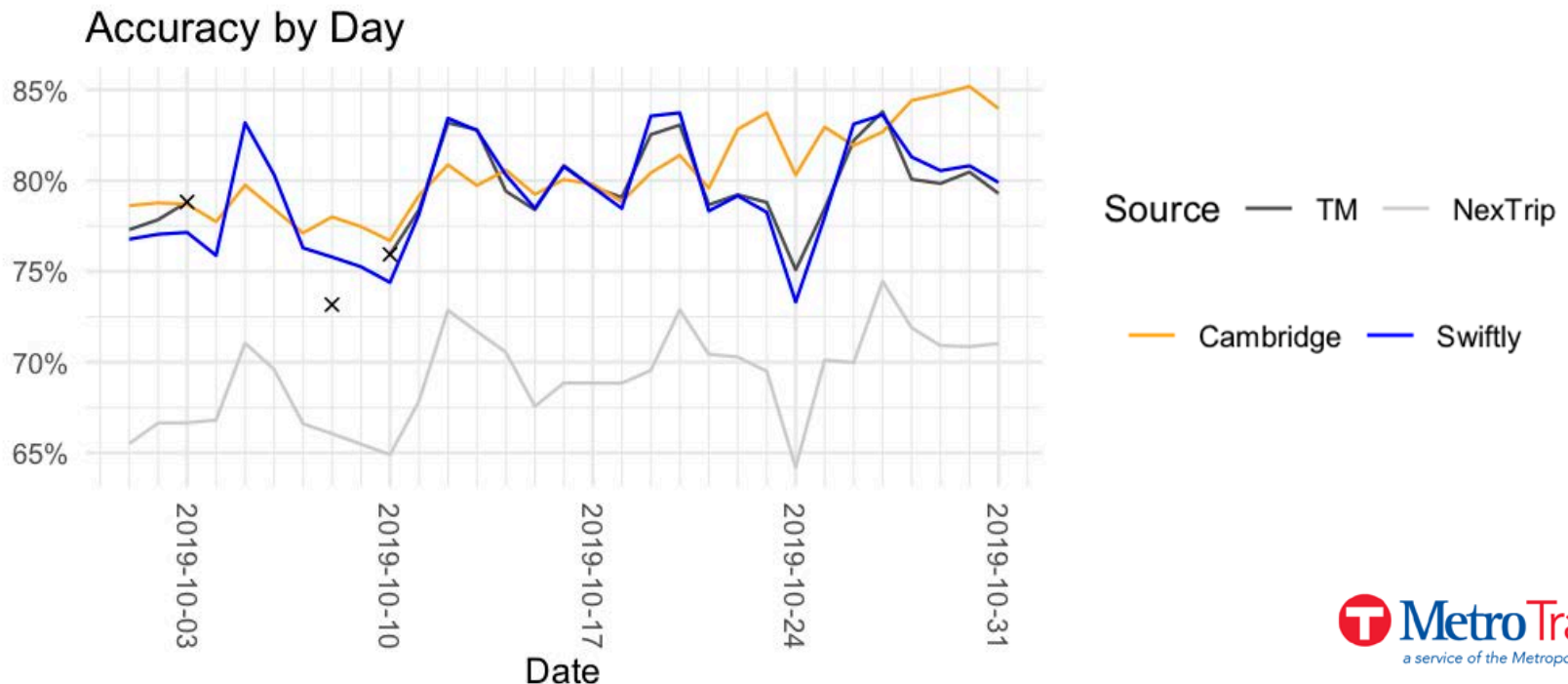
# 2020-12: Real-time Prediction Engine

**Benefits**

- Improved prediction accuracy
- More robust system – eliminates and mitigates conditions that lead to bad predictions currently
- Includes maintenance and support for critical tool
- Industry standard, Google-ready data feed – information available in most popular customer tool
- Foundational to roadmap for ongoing improvements

**Cost**: Not to exceed $972,000 for 4 years

**Request**: Authorize the Regional Administrator to negotiate and execute a contract with Cambridge Systematics

# Business Item #2020-9
## Alerts Manager & Real-Time Concentrator

# Rider Alerts Program Background

- Based on customer feedback, Metro Transit launched initiative in 2014
  - Originally supported planned detours & disruptions during business hours only
- Leveraged existing email and text contract and internally built tools
- Program expansion
  - 2017: Communications Specialist position established in Transit Control Center
    - Added ability to send out alerts for cancelled trips
  - 2019: More staff, expanded coverage for sending out alerts (longer weekday and added weekend hours)

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# Current Gaps

- Manual processes to update alerts through multiple channels
- Alerts not reflected in NexTrip
- Alerts not reflected in Google and other third-party apps
- Trip planning tools do not reflect real-time trip cancellations
- Alerts sent at route level

# 2020-9: Alerts Manager & Real-Time Concentrator

**Alerts Manager Benefits**

- Streamlines process for creating and distributing alerts
- Allow customers to choose more relevant alert options
- Alerts available in industry standard format (Google Maps and other tools)

**Real-Time Concentrator Benefits**

- Reconciles data from Alerts Manager and NexTrip, so customer information is accurate and complete

**Cost**: Not to exceed $800,000 for 3 years

**Request**: Authorize the Regional Administrator to negotiate and execute a contract with IBI Group

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