NAVTEQ

Southeastern Minnesota GIS User Group

October 20, 2011

Topics

- Who is NAVTEQ?
- The Foundation: The NAVTEQ® Map
- NAVTEQ Community Collaborator Program

NAVTEQ Vision

"By revolutionizing the way people think about and interact with maps, we foresee a world in which everyone finds their way to people, places and opportunities more easily and safely than ever before."

NAVTEQ is the leading global provider of location content in the form of maps, traffic and places data that enables navigation, location-based services and mobile advertising around the world

A Global Presence

NAVTEQ

Key Company Milestones

1985: Company founded

1988: Beginning of Royal Philips Electronics relationship

1995: First Internet portal customer

2000: Judson Green named President & CEO

2005: $1.2B Secondary Offering in May (100% secondary shares)

2007: Acquired Mapsolute and Geofactory

2008:Nokia Acquires NAVTEQ

2009: Larry Kaplan named President & CEO

1985 | 1995 | 2000 | 2005 | 2010

1994: First EU factory-installed vehicle navigation system

1996: First NA factory-installed vehicle navigation system

2002: Company becomes profitable and cash flow positive

2004: Renamed NAVTEQ Corporation, $1.0B NYSE IPO in August (100% secondary shares)

2005: Acquired PMI in Korea & MapIT in Mexico

2008: Acquired T-Systems Traffic GmbH

2006: Acquired The Map Network and Traffic.com

Global Market Leadership

Automotive

- Virtually every major automobile manufacturer currently offering a navigation system in North America and Europe uses NAVTEQ® maps in one or more of their models
- More than 19 million navigation systems have been enabled with NAVTEQ® maps since 1999

Internet

- NAVTEQ Maps power major internet mapping portals in North America and Europe
- Billions and billions of map and route planning transactions each year

Wireless

- The leading global wireless brand chooses NAVTEQ maps to help power their location-enabled devices

Mobile Devices

- The foremost PND manufacturers in the world choose NAVTEQ, including some of the most trusted consumer brands, including Garmin, Magellan, Sony, LG, Navigon, Panasonic
- More than 45 million portable devices in EU and NA have been enabled with NAVTEQ maps since 2001

Enterprise

- Leading global supplier of digital maps to Federal Agencies, including National Geospatial-Intelligence Agency and the Department of Homeland Security
- Chosen by top fleet management companies, including Qualcomm and FedEx
- Enterprise software solutions using geospatial data, including Oracle and ESRI

On average, there are over 100 million uses of NAVTEQ data every day

NAVTEQ® Maps are Everywhere

NAVTEQ is the leading provider of the digital map, traffic and location data that powers many of the world's most innovative navigation applications

In-Dash

Telematics

Internet

Mobile

Cell Phones

Trip Planning

Fleet

Enterprise

Government

Strong Customer Relationships

AISIN AW CO., LTD.
American Digital Cartography inc.
appello™
AvMap SATELLITE NAVIGATION
BMW
BOSCH
CACI
CHRYSLER
CITROËN
COYOTE
Cybit
Descartes
DISCRETE WIRELESS
EB
ESRI
Falk
FIAT
GARMIN
GIS Solutions, Inc.
GPS INSIGHT
HARMAN
HYUNDAI
IGN
INTRINSYC
iPUBLISH
JAGUAR
JVC The Perfect Experience
KIA MOTORS
KOREM
LAND ROVER
LOCATIENET
logicom GmbH
LOWRANCE
MAGNETI MARELLI
mapquest
MEDION
Microsoft
MINI
MITSUBISHI ELECTRIC
MOTOROLA
NAVIGON
NDrive powered by you!
NVision Solutions inc
NOKIA
OnStar
orange
ORTEC
Paragon
PEUGEOT
PORSCHE
pTV traffic mobility logistics.
QUALCOMM
RAND McNALLY
ROUTE 66
SAMSUNG
SNOOPER
SONY make.believe
Spime
Sygic
TechniSat
TCS TeleCommunication Systems Enabling Convergent Technologies™
telenav
TELETYPE GPS
teletrac fleet director
TELMAP
TETRAD
T-Mobile
TOYOTA
UNITED NAVIGATION
VOLVO
wave market
webtech wireless
where
where2get it
YAHOO!
ZorroGPS

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The Foundation: The NAVTEQ® Map

A Comprehensive Quality Approach

At NAVTEQ, we build our map step by step. At every stage, we focus on creating accurate, precise data to be used in a wide range of applications

- NAVTEQ's global map build process includes:
  - Field data collection and verification
  - Quality testing and implementation of data sources
  - Database validation and compilation
  - MapReporter
  - Community programs
  - Continuous testing for quality improvement

NAVTEQ is not only focused on building an accurate database, but on keeping it fresh so that it reflects the real world

The NAVTEQ Difference: Its People and Technology

Leveraging the right balance of people and technology allows for NAVTEQ's competitive advantage in providing the highest quality map

- **NAVTEQ's Geographic Analysts:**
  - Local knowledge: 200 offices in 54 countries
  - Field teams "own" their piece of the map
  - Collecting and verifying up to 260 attributes
  - Regular updating of changing/growing areas
  - Identifying new unique local sources
  - Adapting collection methods based on local constraints
  - Responding to customer update requests
  - Defining phonetic translation localization
  - Adding local content coding directly into the map
  - Monitoring quality at every step of collection and production

NAVTEQ MAPS™

Field Data Collection

NAVTEQ Geographic Analysts drove over 1.7 million miles of US roadway in 2010.

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Navigable Map Attributes

- Road name
- Addressing
- Functional class
- Public/private access
- Surface type
- Point of interest (POI)
- Number of lanes
- Speed limit
- Direction of travel
- Road dividers
- Roundabout
- Truck route
- Evacuation routes
- Turn restrictions
- Toll way

NAVTEQ MAPS™

Source Data

- Reduces field costs
- Allow for more rapid map updating and expansion

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Building Relationship, Building Maps

- Accurate, authoritative data at government level
- Powerful local knowledge
- Quicker means of capturing changes in reality
- Allows field collection teams to focus on the value-added components required for safe and accurate routing
- Validation of sources ensure data quality
- Sharing data is a win-win

NAVTEQ LOCATIONS

NAVTEQ MAP REPORTER
Be a Map Reporter™: Point. Click. Report.

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NAVTEQ Success in the Government Industry

Local/County/City

- NAVTEQ works with thousands of local government source providers who regularly provide data without a sharing agreement

State

- NAVTEQ works interactively with several states on the enterprise level
  - IL, NY, MA, OK, FL, VA

Federal

- NAVTEQ is the preferred commercial data provider for several federal agencies
  - NGA, DHS, FCC, EPA

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The Power of a Common Approach: Global Toolkit

Identical software, tools and processes used by our approximately 1,200 geographic analysts are the foundation of NAVTEQ's unique build process

- Examples of software, tools and processes include:
  - Multi-view cameras which enable a complete view of the road to optimize data quality and collection efficiency
  - Geo-referenced audio files allow for "virtual re-drives" and provide context for field coding during production
  - Inertial Measurement Units (IMU) aid in collection where GPS signals are unreliable and provide the precision needed for advanced data collection
  - Automated feature extraction and real-time validation tools help ensure equal emphasis on efficiency and quality

NAVTEQ True

- Panoramic cameras
- Positioning sensors
- High-resolution multi-view cameras
- 360 degree LIDAR

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United States

Current Release: Full Coverage

Coverage

Current Release	Q3/11
Prime/Complete	100%
Population	300,327,626
Population	83% Prime 17% Complete
Core POI	2,187,469
Miles/KM of Road	5,474,365miles/8,810,137KM
Miles/KM of Verified Road	2,854,646 miles/4,594,107KM

Content Highlights:

- Visuals: 3D Landmarks, 3D City Models, Motorway Junction Objects, Sign as Real, Enhanced Junction View
- Voice: NAVTEQ Voice™, NAVTEQ Voice™ for Traffic, NAVTEQ Voice ™ for Natural Guidance
- Pedestrian: NAVTEQ Discover Cities™, Destination Maps
- Natural Guidance
- Journey View: Sample Data Available (San Francisco)
- Additional POIs: Extended Listings, Monthly POI XML
- Dynamic Content: Fuel Prices, Air Travel Status
- Navigable Attributes: ADAS, Toll Cost
- Addressing/Enterprise: Point Addressing, Distance Markers in Transport Map
- Transport : Truck Parking, Truck Stop POI, Loading Dock Locations

Future Developments:

- Rural Mainenance
- Expansion of Extended Lane and Lane Markings
- Improvement in Addressing with Point Addressing
- Expansion of Visual Content with additional 3D City Models, 3D Landmarks, etc. and launch of Enhanced 3D City Models
- FC 3-4 Expansion of Slope & Height
- Expansion of Dynamic Content

Most Accurate and Comprehensive Global Footprint

NAVTEQ Map
Intermediate Map
Entry Map

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Global Content Portfolio

Navigation (Drive & Walk)

Point of Interest

Visuals

ADAS

Traffic

Address & Enterprise

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Community Collaborator Program

What is NAVTEQ's Community Collaborator Program?

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What is NAVTEQ's Community Collaborator Program?

- Brief history
  - A need for more community based updating was recognized and this Community Collaborator Program arose from that need. There have been 3 pilot programs to date.
    1. University Collaborators-Students in Geography/GIS from mostly Online Universities are invited to participate in map updating through Map Reporter.
    2. Map Reporter Stars-This group is historically familiar with our Map Reporter system and was selected due to high quality and quantity of Map Reports submitted.
    3. Government Collaborators-this group is composed of rural county level government officials. The invitations were sent to counties from which we had received sources and those sources were previously implemented during a Rural Expansion process. Goal with this group is for them to submit changes that have occurred in their county since source implementation.

Current Status

- Current Status
  - 15 counties enrolled as County Government Collaborators
  - Total of 48 Community Collaborators
  - Over 1,000 MR's have been submitted as part of Community Collaborator Program
  - Over 1,600 backlogged MR's have been resolved as part of the Program

- MR Star
- Gov't
- University
- Combination of Programs

Locations of Current Community Collaborators

By County

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MR Submittals

These counties represent all the MR Submittals (previous MR's and Community Collaborator MR's) of all 22 MR Stars. Colors differentiate Collaborators.

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What is NAVTEQ's Community Collaborator Program?

- Community based update method using local knowledge to improve overall accuracy- particularly in rural areas

- Benefit for NAVTEQ
  - Authoritative contributions
  - Community relationships

NAVTEQ is not only focused on building an accurate database, but on keeping it fresh so that it reflects the real world

Benefits

- Benefits to Participants
  - Access to a unique Map Reporter portal to identify, investigate and resolve issues with the NAVTEQ map
  - Prioritization of Map Reports
  - Timely resolution of Map Reports submitted
  - Communication to NAVTEQ personnel on program related issues through email
  - Quarterly Newsletter
  - Updated mapping for citizens of the county
  - Faster access to new reporting tools currently in development

Map Reporter

- Map Reporter is our current portal for submissions
  - Participants are given access via a special url vs. the Map Reporter on the NAVTEQ home page
  - Participants are able to track submissions online in Map Reporter

Map Reporter - Log In

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Map Reporter - Overview

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What Collaborators have said:

- MR Star Response
  - "I can't thank you enough for inviting me to be a part of the Community Collaborator Team.

    I have been sending reports to NAVTEQ for several years because I want other drivers out there to have access to the most accurate data available.
    As you may already know, I'm an over the road truck driver. I spend the majority of my time somewhere on this Great Nations roads.

    I am also a Beta Tester for Rand McNally. I also send data to them to improve on the data and performance of their GPS systems for truckers. My goal in doing this is not so much because I want RM to have the best GPS available. It doesn't really matter to me who has the best truck gps. What does matter, is that of all the truck gps systems available, I'd like them ALL to have the latest and most accurate data available, regardless of the manufacturer. Since most use NAVTEQ as a base map, what better place to submit data corrections to than the source or root, which is NAVTEQ."

Registration is Easy

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NAVTEQ, the leading global provider of location content in the form of maps, traffic and places data, has developed a program for various levels of government employees to participate in the map updating process by becoming Community Collaborators.

NAVTEQ Community Collaborators will be part of a free program that offers the following benefits:

1. Ability to engage in a structured geographic program in one's local area
2. The submissions made as a part of this program will be prioritized for quick resolution.
3. Faster access to new tools being developed.
4. Ability to track personal activity through an online tool.
5. Ability to understand what other NAVTEQ Community Collaborators are accomplishing through a quarterly newsletter.
6. Communication to NAVTEQ personnel on program related issues through email.
7. Contributing to better maps in one's local area, which can benefit one's community.
8. Easy minimum level of submission activity to maintain continuance in the program.
9. Navteq is continually working on ways to make the program more efficient and user-friendly.

The NAVTEQ map database is utilized in a wide range of commercial products and applications. You'll find NAVTEQ data onboard most in-vehicle navigation systems sold in North America as well as internet routing applications, 911 systems and location based services. Your local data submissions will help us verify and ensure that our geometry, naming, and addressing of streets is up-to-date, especially with new subdivisions or existing roads that have been changed. Ultimately, having an accurate map allows navigation and smart phone users better access to your geographic area and helps support economic development for the local community by helping everyone accurately get to their destination.

To join, please complete the following steps:

1. Submit completed "Community Collaborator – Registration Form" to NAVTEQ at communitycollaborator@navteq.com
2. Receive from NAVTEQ your access information to the Map Reporter Tool.
3. Review the online tutorials and support within the online Map Reporter Tool.
4. Begin utilizing the online Map Reporter Tool with submissions.

Thank you for your consideration. Please send any questions to communitycollaborator@navteq.com

Best Regards,

Community Collaborator
NAVTEQ

Registration Form

Registration Form for NAVTEQ Community Collaborator

NAME:

ADDRESS:

JOB TITLE:

EMAIL ADDRESS (for communication purposes only, we will not distribute or use your email for solicitation):

PREFFERED GEOGRAPHICAL AREA OF FOCUS (List Each, either by City, County, or Zip Code):

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

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Questions??

Thank You!

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