Bay Area Spatial Information System:
Gathering Baseline Information for Use in Plan Bay Area 2050

Plan Bay Area 2050 Summer Webinar Series
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August 2019
Today’s Webinar

- Quick Introduction to Plan Bay Area 2050
- BASIS Intro
- BASIS Technical Overview
- How We Use BASIS
- Local Jurisdiction Review
- Q&A + Future Webinars
What is Plan Bay Area?

- The regional plan is a blueprint for growth and infrastructure for the next 30 years.
- The regional plan is updated every four years, with this major update due in 2021.
- The regional plan is a reflection of the shared priorities of the diverse nine-county San Francisco Bay Area.
- The regional plan is fiscally-constrained, even as it aspires to tackle the Bay Area’s big challenges with specific strategies.
- The regional plan is not an expenditure plan; it is focused on setting priorities and over the long term and looking holistically across “silos”.

Overview
High-performing strategies and projects from Horizon - those that are resilient to uncertainties - will be recommended for inclusion in the Preferred Plan Bay Area 2050 (RTP/SCS).
What Topic Areas Do These Efforts Tackle?

Horizon and Plan Bay Area 2050 are addressing four core topic areas, as we work to create a long-range integrated regional vision for the next 30 years.

Transportation
Housing
Economy
Environment
Plan Bay Area 2050: Summertime Webinar Series

Growth Framework Update
- June 26, July 1 & July 10
  - New Criteria and Submitting Letters of Interest/Letters of Confirmation

Preparing for Plan Bay Area 2050
- July 9
  - Public Engagement Process Overview
- August 6
  - Bay Area Spatial Information System (BASIS)
- To Be Scheduled
  - Horizon Perspective Paper 5: Bay Crossings
- September 5
  - Looking Ahead: The Vision for Plan Bay Area 2050
- September 10
  - Exploring Policy Questions with Models

In Case You Missed It! (ICYMI)
- July 30
  - ICYMI: Horizon Futures Round 1 Analysis
- August 14
  - ICYMI: Horizon Perspective Paper 1 - Autonomous Vehicles

Target audience:
- Cities, counties, and CTAs

Target audience:
- Stakeholders & interested public

Target audience:
- New stakeholders/public

More information available at:
What is BASIS?

Bay Area Spatial Information System:
A Land Use and Transportation Database for Bay Area Planners
What is BASIS?

✓ A Secure, Accessible Data as a Service (DaaS) Platform for the Collection, Standardization, Discovery and Dissemination of Key Datasets used in Regional Planning Efforts

✓ A Well Documented, Organized and Reliable Source of Regional Data

http://basis.bayareametro.gov
What is BASIS?

[ ✔ ] Provides a **Single Source** of Information that **Tracks Trends** Associated with Development Conditions, Land Use, and Environmental Impacts Associated with **Future Growth** and Changes to the Physical Landscape

[ ✔ ] Provides a **Common Framework** to Discuss and **Plan for Future Growth** in the Region
BASIS is comprised of 4 key components

1. Data Collection Approach
2. Well Defined System Architecture
3. Physical Data Model
4. Established Business Process
It is imperative that we understand the breadth of knowledge and expertise of each jurisdiction that we seek to collect data from in a structured, efficient and repeatable process.

“A wise fisherman knows best how to cast his line to have the most success with minimal
How is BASIS Structured?

Suite of Tools and Applications Supported by BASIS

Data System
- Data Lake
  - Data Management
    - Governance & Integration
    - Documentation & Quality Assurance
    - Data Security
    - Data Access
    - Data Modeling
  - Amazon S3

Data Sources and Types Supported by BASIS
- Data Sources
  - csv
  - Excel
  - ArcGIS
  - Published Reports
  - APIs
  - Other Geographic Formats
  - Socrata Local Govt., Open Data

Applications
- Statistical Analyses
- TeamSQL
- Business Intelligence
- Reporting
- Tableau
- Excel
- Online Mapping
- Spatial Analyses
- UrbanSim
- Custom Apps

Data Discovery Toolbox
- Data Accessibility, Discovery, Process Documentation
  - Translate
  - Discover
  - Disseminate, Document
- BASIS PORTAL
- Socrata Regional Open Data

Data Processing Toolbox
- Data Ingestion & Wrangling Services/Tools
  - Data Collector
  - Data Cleansing
  - Extract, Transform, Load (ETL)
- Lambda function
- AWS Data Pipeline
- TRIFACTA
BASIS Short Demo...
Discussion

Let’s chat for a few moments about your thoughts regarding this tool. We would love to get any feedback, thoughts or ideas that you may want to share with us at this time.
How We Use BASIS for Plan Bay Area 2050

Bay Area Spatial Information System:
A Land Use and Transportation Database for Bay Area Planners
Working to Improve Baseline Data

Improving Data on existing land use conditions in partnership with local jurisdictions

Collection → Modeling → Data Management → Validation/Feedback → Dissemination/Analysis/Reporting
This work is largely a staff-driven effort to bring key regional datasets onto an industry-standard Data as a Service (DaaS) Platform that supports greater collaboration with external partners.

Key BASIS datasets are expected to be ready in time for the Plan Bay Area 2050 kickoff in the fall - and will be used for UrbanSim 2.0 model runs.
What datasets are specifically being updated at this time?
BASIS Supports UrbanSim in 3 Key Ways

Inventories of Local Development Policies and Pipeline Projects

existing jurisdiction-level development fees and approvals process timeline

existing jurisdiction-level land use policies, funding and goals

maps of existing Urban Growth Boundaries

information drawn from current general plans, specific plans, zoning and committed pipeline projects that describe what and how much can be built in a location

Builds an Inventory of Land & Buildings (Existing Land Use Characteristics)

Provides the data needed to build a "current year" map of the region's parcels, buildings, residents, and employment

maps what is on the ground now and is built from parcels

commercial buildings, historic buildings- a list of parcels that cannot be redeveloped because they are historic

provides a list of parcels that cannot be developed in a future forecast

Provides Tools for Consistent Review and Feedback from Local Jurisdictions
Local Jurisdiction Review and Feedback

Bay Area Spatial Information System:
A Land Use and Transportation Database for Bay Area Planners
We Need Your Help

What We Need You To Do

✓ Each Jurisdiction will be asked to review key baseline datasets that we use in the Plan Bay Area modeling process to develop the preferred scenario for the plan
✓ These datasets include information on zoning, development pipeline, sphere of influence and growth boundaries
We Need Your Help

Why We Need You To Do It

✓ In an effort to establish baseline existing land use conditions, we require current data on local development constraints, growth policies, development pipeline activity, and the inventory of land available for future development.
We Need Your Help

When We Need You To Do It By

✓ We expect to launch the review process by early September
✓ Local Jurisdictions will have 60 days to complete their review of their BASIS Datasets
✓ The review will be conducted online using the BASIS Website
✓ Review Instructions will be mailed out to our local partners by mid August 2019
Your Input Matters!

TELL US WHAT YOU THINK

we suggest that you...
great job...
excellent service
smooth operation
I would like to see...
friendly people...
For Questions, Comments, Feedback?
basis@bayareametro.gov

Key Staff Contacts for BASIS within the Regional Planning Program

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Thanks for attending today’s webinar!

Please don’t forget to visit the BASIS website and provide us with any feedback, comments or suggestions that you may have!
Reminder: Upcoming Webinars

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