Today's discussion

1   Achieving Outcomes   Using Flow and Link to achieve the City's goals.

2   Analytics Dashboard   New data sources lead to new possibilities

3   Data Management   Best practices on architecture, privacy and more

4   Scaling Impact   Business Model, Implementation and Project Management

New approach: Open platform creates ongoing value for all

CITIZEN	COMMERCE	CITY AGENCIES & PARTNERS
Ongoing, visible innovation… in service of equity, access and livability	**Generate new funding streams…** from businesses and citizens to enhance and augment public services	**Share capabilities…** across agencies, transit, county/state and other cities, reducing cost and easing collaboration

Flow Applications

Link

Flow Analytics

Flow Data Platform
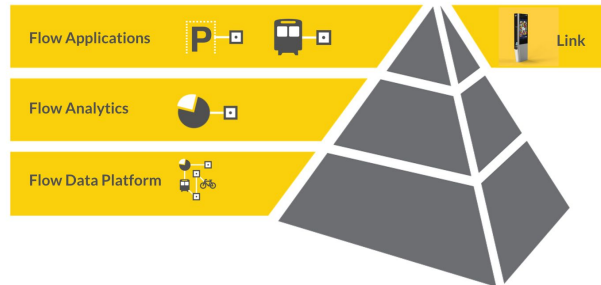
Flow and Digital Kiosk work together to create sustainable funding streams

DEMAND MGMT

Use **Flow Parking** dynamic pricing and smart enforcement to generate revenue while better serving citizens
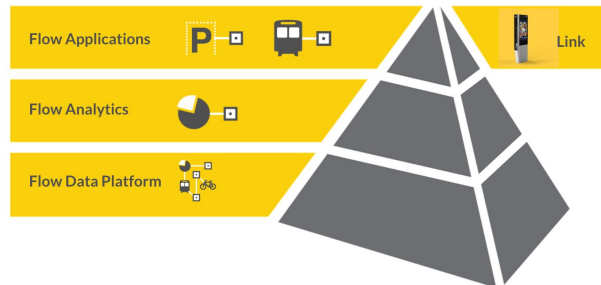
MARKETPLACE FEES

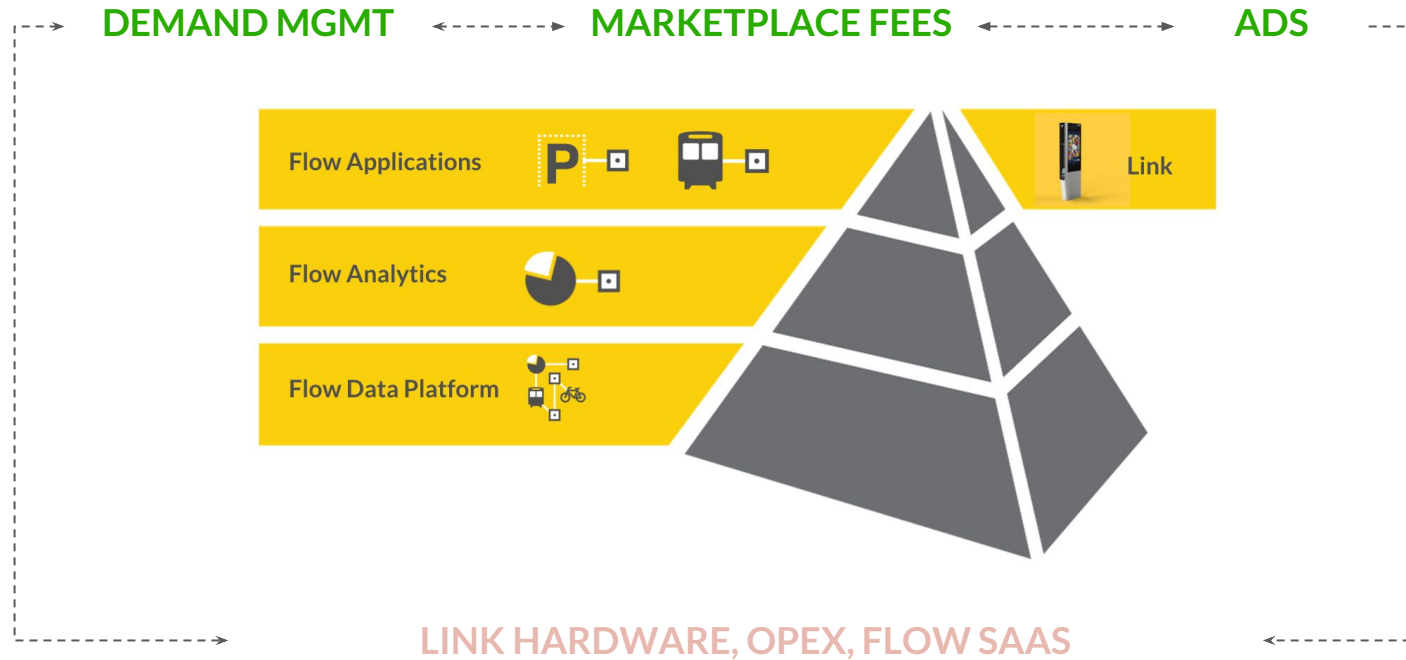Use **Flow Transit** supplier marketplace to expand transit while earning a fee

Use **Flow Parking** virtual lots to generate revenue from private lot owners -- while reducing housing / business costs

OPTIONAL: ADS

Upgrade **digital Kiosks** to serve targeted ads from local or national businesses, earning a revenue share for the city that can be re-invested into transportation

Flow Applications

Link

Flow Analytics

Flow Data Platform

Success-based pricing aligns incentives

DEMAND MGMT ← → MARKETPLACE FEES ← → ADS

Flow Applications

Link

Flow Analytics

Flow Data Platform

LINK HARDWARE, OPEX, FLOW SAAS

Flow & Kiosk

Flow Parking & Transit

Deploy Flow Parking for paid on-street & off-street lots, with inventory, occupancy, demand management, and parking marketplace.

Deploy Flow transit with >1 multimodal transit operator, payments system for shared mobility and integration into Kiosk

+

Kiosk without Ads

Deploy 100 Kiosks in targeted neighborhoods

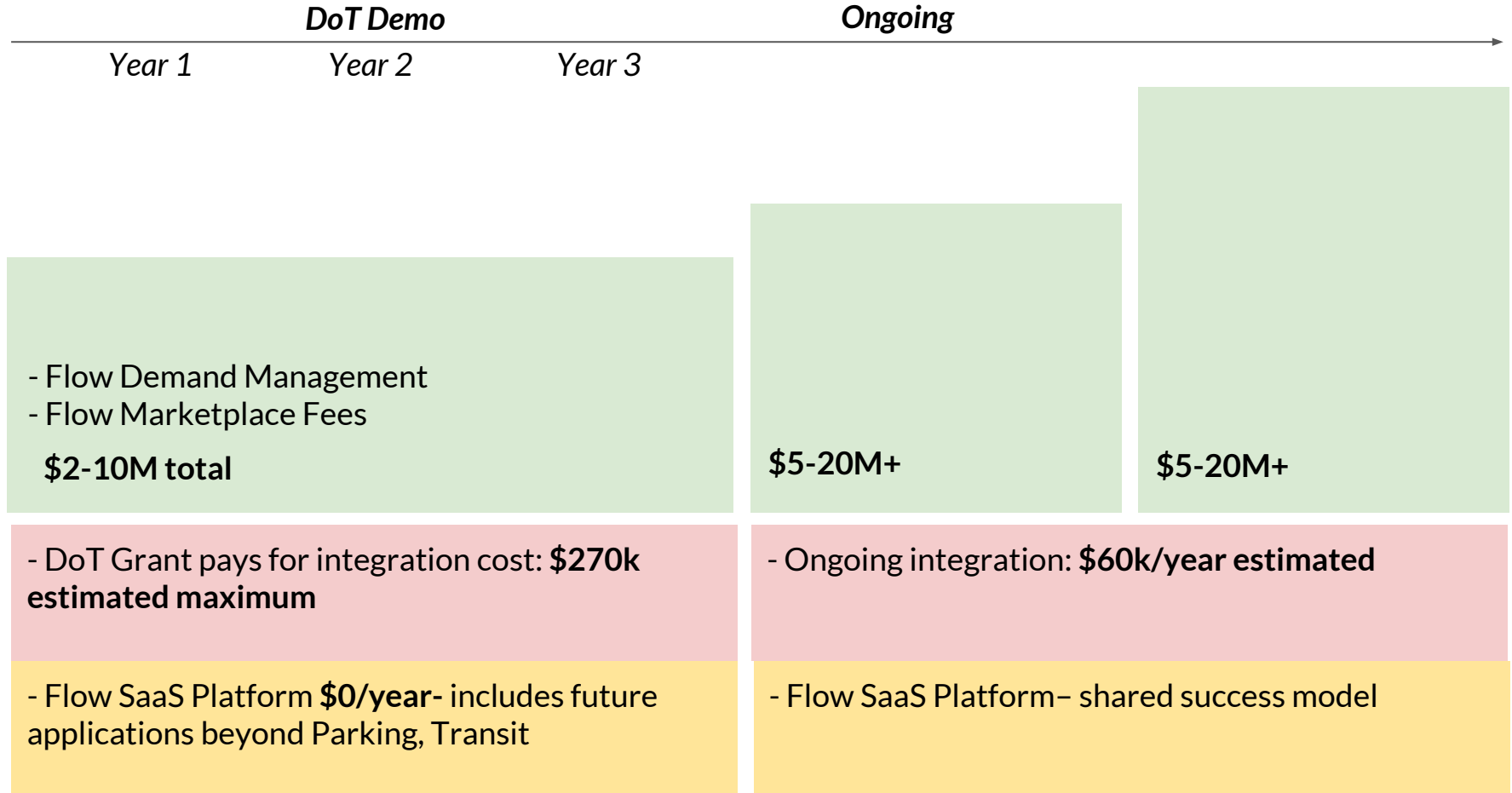Fund install, operation and Gigabit connectivity

or

Kiosk with Ads

Upgrade Kiosks to support ads, funding post-demonstration costs

Flow Data Platform (w/Data Exchange) and Analytics
enable Flow Parking & Transit, Link sensing, 3rd party apps

Flow Parking + Transit

DoT Demo   *Ongoing*

Year 1   *Year 2*   *Year 3*

- Flow Demand Management
- Flow Marketplace Fees

$2-10M total

$5-20M+

$5-20M+

- DoT Grant pays for integration cost: **$270k estimated maximum**

- Ongoing integration: **$60k/year estimated**

- Flow SaaS Platform **$0/year-** includes future applications beyond Parking, Transit

- Flow SaaS Platform– shared success model

Kiosk without Ads (fixed)

DoT Demo   *Ongoing*

Year 1   *Year 2*   *Year 3*

- Kiosk hardware & config: **$1.7M total**
- Flow basic support for sensors: **$100K total**

- Kiosk install, integration, more zones connectivity, maintenance, power: **<$5.7M total**

- Kiosk connectivity, maintenance, power: **<$1.2 M/yr**

Kiosk with Ads (success model)

DoT Demo	*Repay: 2+ years*	*Ongoing*
Year 1 *Year 2* *Year 3*		

- Kiosk ads: **$1.5M total**

- Kiosk ads: **$3M+/year**

- Kiosk ads: **$3M+/year**

- Kiosk upgraded for ads: **$2.3M total**

- Kiosk hardware & config: **$1.7M total**
- Flow basic support for sensors: **$100K total**

- Kiosk repay: **$1.2M/yr**

- Kiosk install, integration, more zones connectivity, maintenance, power: **<$5.7M total**

- Kiosk connectivity, maintenance, power: **$1.2M/yr**

*financing eligibility based on mutual siting process with Sidewalk

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Implementation & Funding Considerations

- What is the program office structure?

- Where should Kiosks be placed to meet advertising, feasibility, and equity goals?

- Is there existing fiber connectivity in desired locations?

- How soon can we show visible value to citizens? What are the success metrics?

- What are long lead time items? Where will legislative / regulatory change be required (e.g. franchise agreements) ?

- What's the impact of funding availability, city budget cycles etc.?

Conceptual Timeline

Sidewalk will launch Data Exchange starting with Google Urban Mobility data to create analytics dashboard for city

City to ease permitting, right of way access

Sidewalk to open Cloud Data Exchange to 3rd parties to help plan and orchestrate routes between public / private transit

City + Transit Agency will partner with Sidewalk to launch **Multimodal Service** to improve access to transport, leveraging **Digital Kiosks** and other interfaces

January 2017

2018

June 2016

August 2016

July 2017

City + Sidewalk to place Links within Zones using data-driven approach, choose applications to deploy with systems engineering approach

Sidewalk to deploy **WiFi Kiosks** subject to permitting

City + Sidewalk to create data pipeline delivering accurate asset information starting with parking

Sidewalk to implement **Dynamic Parking** in >1 zone configuring Pricing Engine as needed

Sidewalk to create custom reports drawing on Analytics and Data Exchange to inform City transportation demand planning

Sidewalk to create **API** to enable 3rd parties to surface real-time city rules by location or place